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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

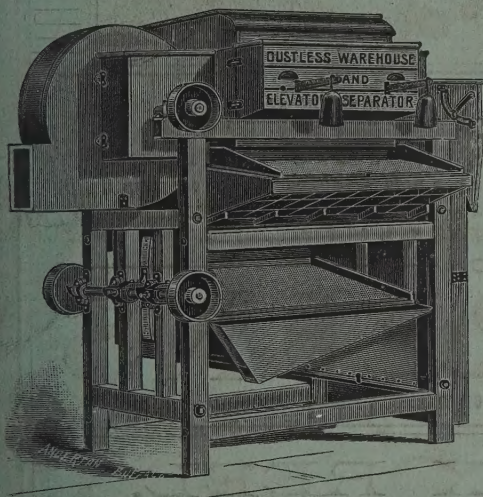
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VOL. VI.

CHICAGO, ILLINOIS, NOVEMBER 15, 1887.

No. 5.

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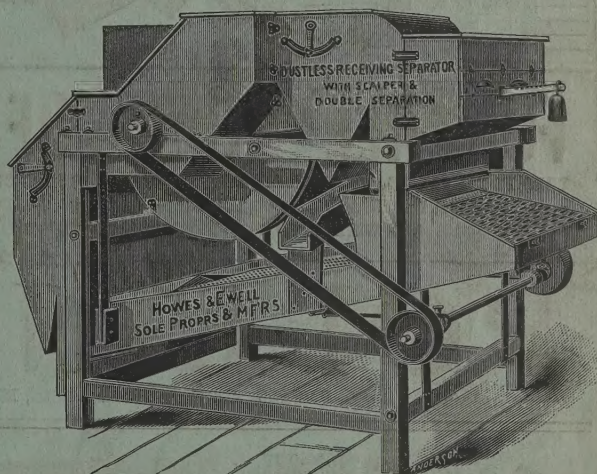
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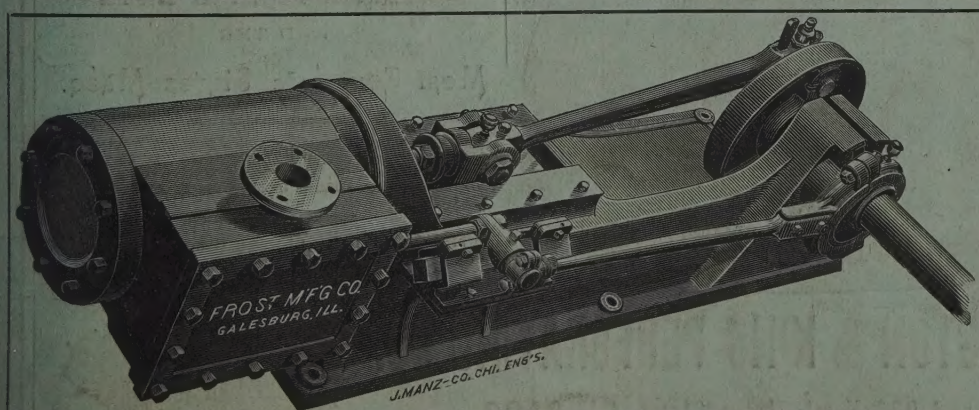
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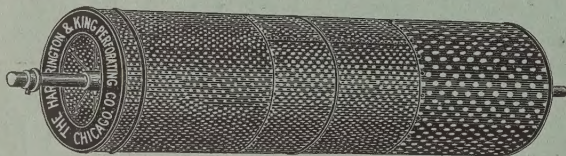
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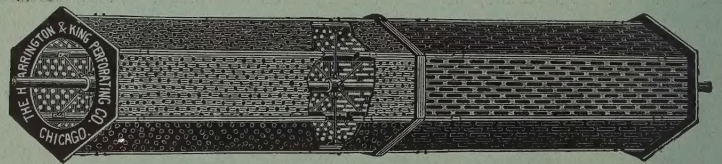
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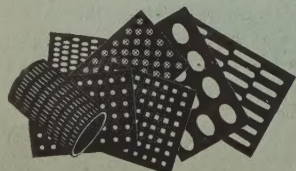
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### ILLINOIS GRAIN DEALERS.

The Illinois Grain Dealers' Association met in convention at Peoria Oct. 18. About forty members were present. A number of topics of interest were discussed, among them "Track Weight and Clean Bills of Lading," "Chicago Elevator Charges," "Inter-State Commerce Law," "Insurance," "Storage in Country Elevators," and "The Landlord's Lien Law." The evening session was devoted to the reports of officers and a discussion of the question, "Does the Association Pay?" It was decided by a unanimous vote that it did. The convention passed resolutions of sorrow and respect for the death of Mr. John Penfield of Rantoul, a member of the executive board, and B. C. Beach of Champaign was elected by acclamation to fill the vacancy. Springfield was selected as the place for holding the semi-annual meeting next June.

### TROUBLE IN THE CAMP.

President A. M. Wright of the Chicago Board of Trade is occupying the unpleasant position of a man between two fires. About the first of July, when the anti-bucket-shop law went into effect, the directors gave Mr. Wright undivided authority to wage war against these annoying hangers-on of the legitimate traders, and with his accustomed energy he entered into the fight with uncompromising determination. Then his troubles began. He was accused of all sorts of blunders, mistakes and misdemeanors, of favoring the Western Union Telegraph Company; of pursuing a narrow and injurious policy; of favoring the city, and of shutting off quotations to bucket shops in the East; of doing too much and too little. He was blamed for the dullness of trade, and for not consulting the very directors who placed the absolute power in his hand; in short he by no possible means could do right or please the members of the Board.

Then came the trouble with the New York Produce Exchange which he was asserted to have called "nothing but a big bucket shop," and for which he was burned in effigy by some of the hot-blooded young members of that body. Another grievance has just been brought up against him. It is said that while he was apparently fighting the bucket shops, he was at the same time filling orders on the Board for certain ones in the city. This charge, which Mr. Wright does not deny, although not at present engaged in taking such orders, certainly showed an inconsistency in conduct which needs some explanation. The suspension of R. H. Thornton on the ground of some jocular remark made to Mr. Wright in regard to the continued ringing of the great bell on the floor of the Board of Trade, is the latest cause of complaint against his presiding officer, and the members feel that in this

case he has overstepped his authority. Mr. Wright has evidently not found his position so far a bed of roses, and will scarcely be anxious to retain it for another year.

### A PECULIAR WHEAT.

A peculiar wheat is described by Mr. J. Oliver Smith of Rosciada, N. M., who sent us some heads, one of



which we have had engraved and which accompanies this article. Mr. Smith says: "This wheat is raised generally by the Pueblo Indians, of this territory, by whom it is called 'Siete Espigas,' meaning 'seven heads,' and its origin is traced back to Montezuma. It is of such a nature that it will not mix with any other kind of wheat, it will not create any smut, and it will undergo the longest drouth or the heaviest rains without receiving any injury from either, and last, but not least of all its qualities, it is the hardest wheat to grind that I have ever handled in my thirty years' experience as a miller."

In some parts of Dakota farmers have been obliged to haul their wheat home again, as the warehouses are all full and no cars can be procured to ship the grain.

### SAN FRANCISCO WAREHOUSES.

A correspondent in one of the daily papers calls attention to the fact that the warehouse people who have located on Carquinez straits have steadily encroached upon the channel of stream and that their depredations have gone to such great lengths that a natural process of damming is now in progress which ultimately may cause an overflowing of the waters of the Sacramento and San Joaquin and the destruction of a vast amount of valuable property through the valleys. The straits of Carquinez was no place to locate the warehouses and it is questionable if their owners have any indefeasible legal right to maintain them in their present location. It is a fact that the supervisors of Contra Costa and Solano counties are empowered "to grant franchises and privileges to drive piles, build wharves and storehouses on the straits to the greatest depth attainable by piles," but it may be questioned if it was ever intended that they might raise the bed of the stream by assisting a natural process and then drive their piles, under the county franchise. In such an interpretation of the law the wharf builders might span the straits at its widest point in the course of a few years and completely obstruct the natural outlet of the torrent of waters from the high Sierra Nevadas. If the warehouse people are not reasonably conservative in the use of the extraordinary rights and privileges which have been granted them they may be called upon by the people of the state to explain how they acquired title to the property over which they now exercise the rights of ownership.

In any event they have not made a wise selection of a permanent site for a warehouse center. The King street warehouses are better located as we view the probable increase in the volume of commerce of the port. The Humboldt warehouses at Spear and Harrison street or any of the number at Rincon Point have advantages over those located on the straits which cannot be overcome. Commercial minds in San Francisco have said that to bring ship and car together was the greatest desideratum in the advancement of the commerce of the port. Warehouse people have been among the staunchest supporters of the proposition. They have seen the advantages in the location at Rincon Point and at King street and more of them now are looking that way. Some have gone still further out, to the Potrero and even beyond, in the search for a suitable warehouse site on the bay shore. At the Potrero the great desideratum has been found and the great feat has been accomplished. There never is a week that some foreign vessel, ship or steamer does not arrive at the Potrero to discharge cargo consigned to the great manufacturing companies there located. The locomotive comes up to the inner confines of their territory and takes away in carload lots and trainloads the product of their industry. Here ship and car have been brought together in



good earnest. Here the warehousemen could have found a place where the model warehouses of the world might have been constructed. Ships of the deepest tonnage could dock at their wharves, and switches and side tracks from the main line could be run, as they actually have been in several cases, inside the warehouses, giving the greatest facilities in the loading and unloading of cars and in the taking and discharging of cargoes. Commerce in San Francisco is steadily going southward and it is only a question of a few years when all the greater manufacturing and mercantile enterprises of the metropolis must find a place down along the bay shore from Rincon Point out to the Potrero.—*Change.*

## MINNESOTA AND DAKOTA GRAIN CROPS.

The *Pioneer Press* of St. Paul, Minn., has published an estimate of the grain crops in the state and territory, based on reports from its own correspondents in every wheat-growing county of these two sections. The same correspondents, the *Press* says, have served it faithfully for four years, and their information may be relied on as accurate. The basis of the wheat acreage for Minnesota are the figures furnished by Mr. H. Stockenstrom, assistant secretary of state and statistician, whose report is made up from assessors' reports. The average yield per acre is  $12\frac{1}{2}$  bushels, which on 3,046,000 acres (Mr. Stockenstrom's report) would yield 38,085,000 bushels. In Dakota the increase in wheat acreage this year is about 400,000, making a total of 3,075,000. The average yield per acre is  $15\frac{1}{2}$  bushels, making the total crop 47,662,000. This means a total crop for Minnesota and Dakota of 85,747,000, or 86,000,000 in round numbers, as the exact average in Minnesota was 12.7 bushels. In Southern Minnesota the wheat crop is almost a failure, many counties raising but little over the requirements for bread and seed. The present crop in Minnesota is 8,710,000 bushels less than the crop of 1886, reported by the state department, and about 4,000,000 less than the amount given by the Washington bureau. In Dakota the crop is about the same as last year. In the upper portion of the Red river valley the yield has been very heavy, averaging over twenty bushels per acre. In the southern portion of the territory and in the great Jim river country, where the crop was practically a failure in 1886, there is a very good average one this year, so that taking the territory over, it has produced about as much in 1887 as in 1886.

The quality of wheat in both Minnesota and Dakota is generally good, a large proportion of it grading No. 1 hard, and taking the average of the state and territory, it is about as good a crop as is raised in the Northwest. The continued succession of wheat crops on the same ground has rendered the crops for the past two or three years very seedy, and much complaint has been made on this account. Wheat received at Minneapolis and Duluth has to be cleaned, and the farmer is docked for the dirt. The average dockage this year is three and one-half pounds. This loss always falls on the farmer and is seriously felt.

The indications are that while the crop will not be large enough to have any great surplus after all requirements have been met, it is still large enough to remove all fears of a serious famine. Most of the old crop of wheat remaining in farmers' hands at the beginning of the crop year of 1886 was brought out and sold during the great wheat corner at Chicago in June, leaving only about 2,000,000 bushels at the beginning of the present year. The demand for flour this year has been phenomenal, and the mills, both at Minneapolis and in the country, have consumed a much larger amount of wheat than during any similar period in the last five years. At the lowest estimates the mills will consume 30,000,000 before the next crop; there will be required for bread and seed 16,000,000, making 46,000,000 for the Minneapolis mills, to feed the people a year and sow the next crop, leaving about 43,000,000 for shipment from Minneapolis and Duluth for outside mills and for consumption by county mills in the state and territory. These requirements, as estimated by the editor of the *Market Record*, an acknowledged authority, are 44,000,000, which would leave a surplus of about 4,000,000 bushels.

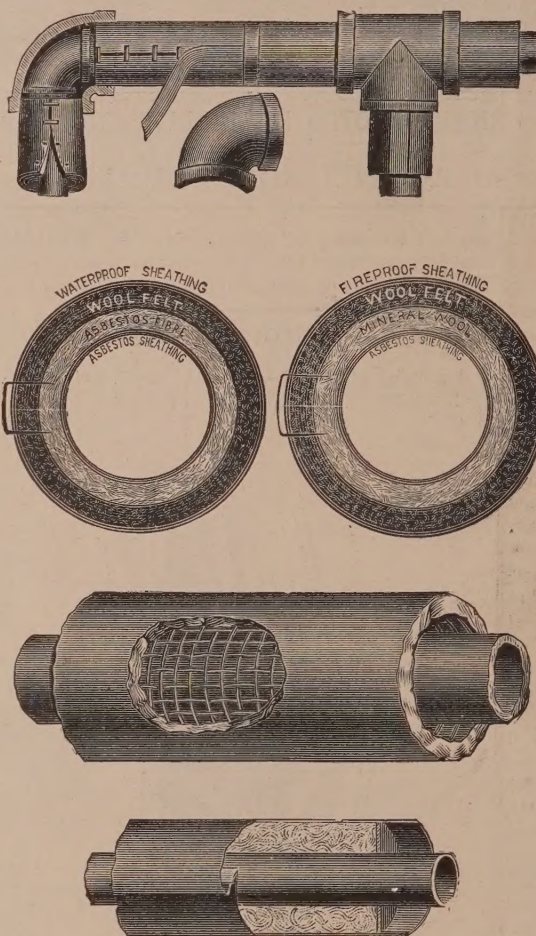
The crop of coarse grains raised in Minnesota and Dakota this year will exceed that of last, though the increase is due more to increase of acreage than yield. The corn crop in Minnesota is much better than that of last year, the increase being about 2,600,000. The quality is gener-

ally very good. The oats crop is a large one, giving a total of 39,631,000, against 35,875,000 last year. The quality is not so good, owing to the chinch bug and dry weather in the early part of the season, and the heavy rains about harvest time.

The corn crop of Dakota is estimated at 23,000,000 bushels, and the quality is excellent and would grade as No. 1 on the Chicago market. About 1,000,000 acres were sown in oats, and the crop raised is estimated at 40,000,000 bushels. The quality is excellent and the average yield from 35 to 70 bushels, some reports giving the yield from 80 to 90 bushels to the acre.

## COVERING FOR STEAM PIPES AND BOILERS.

Using steam pipes without covering them with a non-conductor of heat, is like pumping water into a trough with holes in it; you must pump more water than is actually needed, or stop up the holes; you must generate more steam than is actually needed, or cover the pipes to prevent radiation of heat and consequent condensation. Heat is the power that creates the expansive force of



steam, and the loss of heat from steam pipes represents the loss of an actual amount of energy, an increased consumption of fuel, and an increased cost of running the steam plant, besides the unnecessary wear and tear and racking of pipes, by sudden expansion and contraction, and the heating of buildings, adding to their unsanitary condition.

To illustrate this enormous waste, the eminent authority, *Thomas Box*, in his practical treatise on heat, shows that the loss from an uncovered steam pipe, 4 inches inside diameter, 100 feet in length, with an initial pressure of 35 pounds, would be 587 heat units per running foot, per hour, or almost a horse power. *Weisbach* shows that with a wrought-iron boiler, with 15 square meters extent of surface, containing water at 100 degrees, and surrounded externally with air at 20 degrees, the water is hourly deprived by cooling of 14,115 degrees of heat, which must be replaced by heat from another source, to maintain the temperature of 100 degrees. He further demonstrates that if the boiler is jacketed, the loss of heat by radiation hourly to be 1,743 degrees, or only about one-eighth as much loss of heat takes place as in the case of an unprotected boiler.

From experiments made by disinterested authorities,

we find that the best coverings are those which consist of light porous or fibrous material, such as wool felt, mineral wool or asbestos fiber.

The wool felt is of the same consistency as blotting paper, and its utility as an insulator of heat is realized when compared with copper and iron. Copper conducts 1,900 times as much heat as blotting paper, and 1,600 times as much as wool. Iron conducts 6,500 times as much heat as blotting paper, and 721 times as much as wool.

The above cuts combine all the advantages of fire-proof coverings, being  $\frac{1}{2}$  inch of fibrous fire-proof material and  $\frac{1}{2}$  inch of wool felt, and are practically indestructible; will outlast the surfaces of pipe they cover and protect, and their remarkable heat-insulating qualities are unequalled by any covering in the market. This is proved by scientific facts regarding the material they are composed of, by the indorsement of experts, by the quantities in use and preference shown over other coverings, and the savings in fuel from 10 to 40 per cent., besides other advantages resulting from their use. They are very light, easily applied, and present a neat, uniform and finished appearance on the pipes, etc.

Another excellent covering is mineral wool, eased in sheet iron. It is an excellent non-conductor of heat, very light, is incombustible, and, therefore, cannot char, burn or rot.

The seams and joints are made with great care, and are neat in appearance and thoroughly tight, and no friction or injury from the exterior can abrade the outside of covering, causing the particles or fibers to sift out and injure journals, slides, etc., as happens with fibrous coverings encased in thin paper jackets. For hot blast pipes or parties preferring a plastic covering on steam pipes, boiler tops, we would recommend a cement containing a large per centage of asbestos fiber and infusorial earth, commonly called "fossil-meal."

This composition, for lightness, efficiency and durability is unexcelled; is elastic, and will not crack from expansion of surfaces, and adheres tightly to same; is easily replaced and can be used again. The composition keys itself through the meshes of the wire lathing, where air space is adopted, and this adds to its efficiency.

We would draw the attention of our readers to the advertisement of John A. McConnell & Co., 119 Water street, Pittsburgh, Pa., and would recommend our readers to communicate with them when requiring goods of this kind.

## ELEVATOR-BUILDING IN THE NORTHWEST.

A vast amount of lumber has gone into elevator building in the past two or three years, particularly in the Northwest, and more especially in Minneapolis and Duluth. The short crop has made pertinent the question whether elevator building has not been overdone. In Duluth, for instance, there is a storage capacity of 19,000,000 bushels. The total receipts of wheat at that point up to the first of November had reached only about 5,000,000 bushels, and all the big storehouses were practically empty. This means, of course, that the investment in the big storehouses up there cannot be a remunerative one. The situation is a little better in Minneapolis, where over 12,000,000 bushels have been received and where the storage capacity is not so great. In the country, too, in many of the smaller places the multiplication of elevators has been greater than the situation requires. These are only local conditions, however. Along all the new lines of railroad elevators will be necessary, and the country sooner or later will grow up to the storage capacity now afforded, but in the opinion of the best informed elevator men there will be much less building in their line in the next two or three years than there has been in the past.

—*Mississippi Valley Lumberman.*

A Chicago paper states that twenty-one counties of Kansas will have a surplus of corn; twenty-four have enough to meet local requirements, and the remaining counties will be purchasers to a greater or less extent.

During the last session of the Illinois legislature a law was passed ordering all the railway companies to use the Hopper scales for the transfer and weighing of grain. None of them have yet complied with the law, although several are preparing to do so. These scales are very expensive, requiring the construction of houses similar to elevators, and costing from \$15,000 to \$20,000 each, which is probably the cause of the delay.



## THE BOARD OF TRADE BUILDING AT KANSAS CITY.

The growth of Kansas City has been along many parallel lines, one of which is fine public and business buildings. Our engraving shows the new Board of Trade building, now in process of construction and about finished, exteriorly. It was commenced last March. It is seven stories high above the sub-basement. The walls are faced with press brick and terra cotta. The tower is to be 198 feet in height, and the dimensions of the court 44 by 32 feet. The cost of the building is estimated at

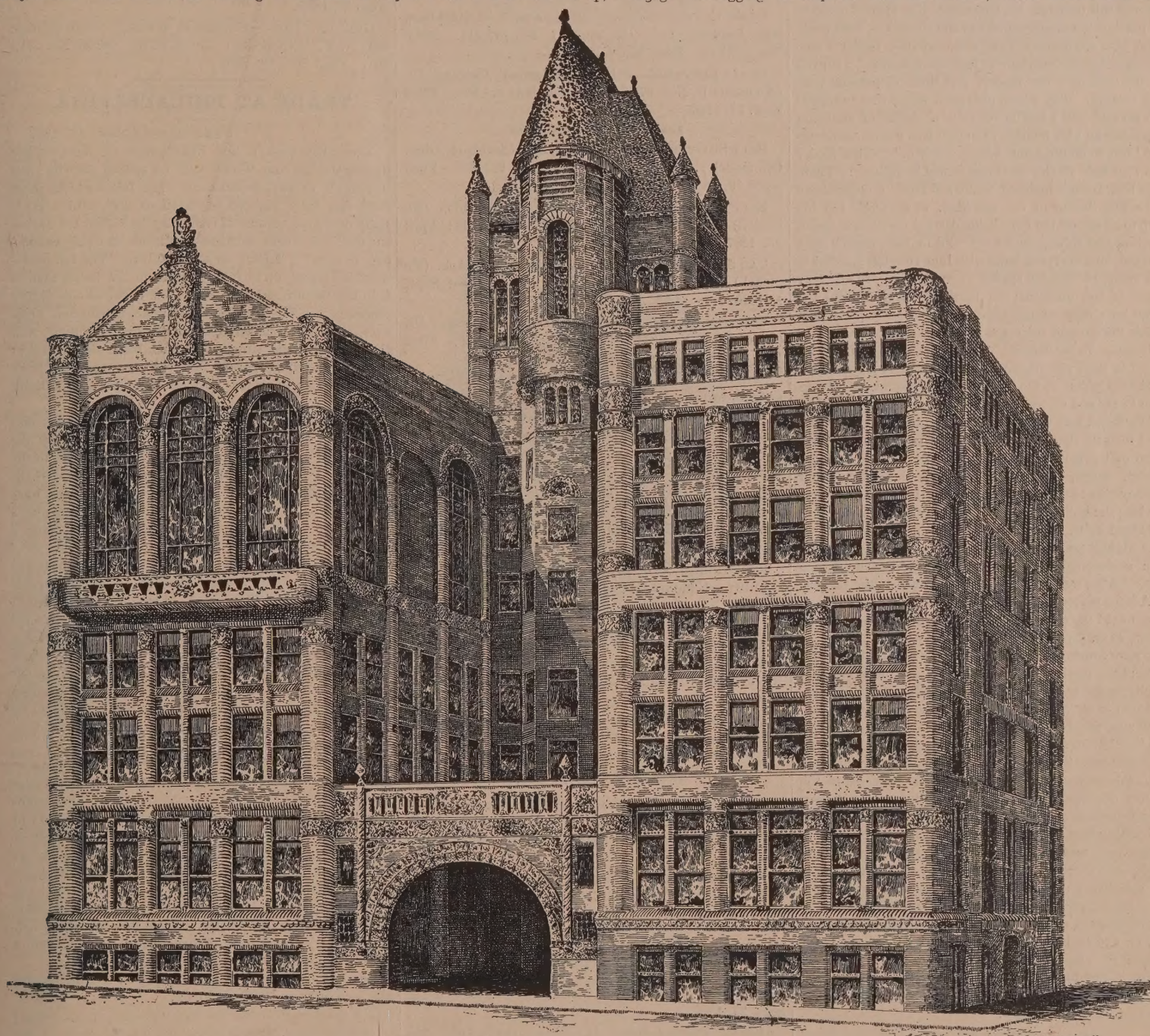
## CORN SHELLERS.

BY C. W. MARSH IN "FARM IMPLEMENT NEWS."

[Continued from last month.]

In 1856 I used a two-hole one-horse power sheller made by the Dillmans of Plainfield, Ill. This had a cob carrier constructed and arranged like the first described as constructed by Mr. Adams, except that the slate consisted of folded strips of sheet metal. These presented a rounded face, but at intervals along the carrier, the front lip or a fold of a slat was left up, to engage with lagging

and what settlements infringing purchasers made I do not know, but I believe they carried closed lips thereafter. These old machines had fans and did good clean work. Cob carriers and fans were usually at that time attachments to power shellers; hand shellers, which were made by the parties mentioned, by Mr. Galt or Galt & Tracey at Sterling, Ill., and others in the West, were mostly of the "Clinton" or the "Burrall" types, and generally without separating devices, or with such as I have described for shooting out the cobs. After cob carriers and fans had been added to picker-wheel shellers, the next step in development was the elevator, which device takes the



THE BOARD OF TRADE BUILDING AT KANSAS CITY.

\$550,000. The officers and directors are as follows: E. H. Allen, President; H. M. Holden, First Vice-President; H. M. Kilpatrick, Second Vice-President; W. H. Miller, Secretary; W. H. Winants, Treasurer; J. P. Campbell, E. H. Webster, J. K. Davidson, E. D. Fisher, H. J. Lathshaw, T. A. Wright, L. E. Irwin, J. S. Chick, A. R. French.

The domestic wheat crop of 1887 has been estimated by the government department of agriculture to be 450,000,000 bushels. The surplus from Atlantic ports is 110,000,000 bushels, of which 40,000,000 bushels have been exported within fourteen weeks, leaving 70,000,000 bushels still available for export. Of this about 15,000,000 bushels will be required without the United States on this continent, leaving at present about 55,000,000 bushels available for Europe.

cobs, and insure their passage up the incline to point of delivery outside. This feature was covered by a patent issued to A. Dillman, I believe, and I recollect that a year or two after, Haskell, Barker & Aldridge of Michigan City, Ind., built shellers substantially the same as Dillman's, and to get over the patent they made these slats of sheet tin with the folds all down, but the front lip was left so that the operator as soon as he saw the need of it could bend it up, here and there along the carrier; and thus they attempted to throw upon the purchaser the burden of infringement. There was considerable trouble with infringers, and much feeling was manifested; for a man's patent was then generally held to be what the law had made it—his property—and depreciation upon his rights therein was considered culpable the same as if made upon other property. At any rate the Michigan City firm stopped building these shellers;

shelled corn from under the machine and carries it up to be delivered into bags. This and other parts were improved and rendered more effective as the maturing experience of manufacturers saw the need.

As I have so far confined myself to this class, to which nearly all hand shellers and the majority of portable power shellers belong—the latter being chiefly for farm to farm service; and as Western inventors and makers have led in modern improvement, owing chiefly to the enormous demand which the development of this great corn section has made upon them, I shall continue in their course for a time and take other types further on.

The next and the greatest improvement for giving capacity to these shellers was the self-feeding device, invented by Augustus Adams along about 1860. At that time one and two-hole shellers—hand and power, and those that had been made with four holes—were fed each



from a table on a level with the feed throats by hand, the operator manipulating the ears so as to present them endways to the shelling devices; for the four-hole machine two men were required, one on each side of table. But the capacity of the power shellers fed thus depended largely upon the dexterity of the attendant feeders, and much loss resulted. To remedy which, quoting from Mr. Adams: "In the fall of 1859 I conceived the idea of carrying the ears to the throats of the machine by a series of belts, which proved a success, although it came near being a failure, as the belts would carry up the corn faster than the throats could receive it, causing clogging. To avoid this difficulty I conceived the idea of making and placing the picker-wheels in the throats as now used, which gave the desired result and made the feeder a success, enabling the operator to feed the machine by shoveling the corn into the feeder, and thus dispensing with hand feeding. The whole plan of it was entirely original with myself, and I had never seen or heard of anything suggesting an idea relating to it; so it was not an 'improvement,' but something not before known." This feeder for a four-hole sheller was constructed as follows: There was a long trough inclined backward from a point above the feeding throats of the machine, at an angle not too sharp to admit of the corn being carried up without much tumbling and rolling backward, and in this trough were arranged four carrying belts with lugs running parallel to each other, in parallel spaces corresponding to the four throats of the machine; the partitions that divided the trough into these spaces were so sloped or tapered that at their lower ends they scarcely rose above the level of the bottom of the trough, but they were gradually increased in their rise from the bottom as they approached the highest point, so the corn, shoveled promiscuously in at the lower end of the trough, was carried forward by the four belts, and as it progressed these rising partitions raised the ears that were lying crosswise above the lugs placed on the belts for the purpose of moving the corn upward, when, being thus released therefrom, their tendency was to roll backward off the edges of the partitions into the hollows between, lengthwise, and on top of the lugged belts, which carried them in that position up to the highest point, whence they were discharged straight down corresponding chutes into the throats of the machine. Afterward, to prevent clogging at the throats, Mr. Adams placed a little picker-wheel at the side of each throat to aid in regularly distributing and in accelerating the ears as they passed to the shelling wheels. These devices were improved in form and construction from time to time; they worked satisfactorily and gave much greater capacity to the shellers, besides providing a way for enlargement to six holes or more, but they did not yet constitute a perfect feeder, for ears would wedge and clogs would still often occur at the feed throats. To remedy this defect and to make a positive feed the invention of H. A. Adams was added in 1872, which consisted in the location of a powerful shaft with wings or projections over the throats, so that in turning they seized upon the approaching ears, at the point where they were likely to hesitate and wedge—just as they touched the shelling wheels—and forced them along through. This device not only completely prevented clogging, but it also increased the shelling capacity largely. Another improvement in the construction of the feeder was made some years after by J. Q. and O. R. Adams, sons of Augustus Adams, but engaged in manufacture at Marseilles, Ill., who substituted chains for the former belts and rollers, thus obviating the difficulties experienced—when running in winter—with ice and snow.

The corn crop in Alabama this year is put down at 32,290,000, against 28,893,000 bushels last year.

A woman farmer in California has cause to be proud of her record in raising wheat this season. She has a farm of 3,000 acres; from this she harvested about 2,000 tons of wheat, which she sold at \$31 a ton, clearing about \$60,000. She owns a combined harvester, which will cut, thrash and sack 30 acres a day. When her crop was ready for the sickle, she started her machine, hired four more and the five went marching around her golden fields—twenty men and 120 horses, cutting, thrashing and sacking 150 acres of wheat each day. It kept five of the men busy sewing up the sacks of grain as they came from the separator; five drove each a 24-horse team, five tended each a sickle, and the other five attended each to a separator. In a minute the standing grain is in the sack ready for transportation. The owner, whose name is Crow, is a widow and attends to the business herself.



#### Issued on Oct. 11, 1887.

**BELT SHIFTER.**—Frank A. Shoemaker, Buffalo, N. Y. (No model.) No. 371,480. Serial No. 243,059. Filed July 1, 1887.

**BLAST GOVERNOR FOR GRAIN CLEANERS.**—Daniel Best, San Leandro, Cal. (No model.) No. 371,411. Serial No. 232,013. Filed March 22, 1887.

**GRAIN ELEVATOR.**—John A. McLennan, Chicago, Ill. (No model.) No. 371,343. Serial No. 214,628. Filed Sept. 27, 1886.

#### Issued on Oct. 18, 1887.

**BELT SHIFTER.**—Wm. H. Price, Jr., Cleveland, Ohio. (No model.) No. 371,625. Serial No. 235,385. Filed April 19, 1887.

**BELT SHIFTER.**—John Walker, Cleveland, Ohio. (No model.) No. 371,647. Serial No. 236,021. Filed April 25, 1887.

**CAR STARTER.**—Chas. E. Bromwell, Helena, Ark. (No model.) No. 371,545. Serial No. 212,389. Filed Sept. 1, 1886.

**FRICTION CLUTCH.**—James McDonald, Chicago, Ill. (No model.) No. 371,606. Serial No. 222,255. Filed Dec. 23, 1880.

**SPIRAL CONVEYOR.**—Hans Birkholz, Milwaukee, Wis., assignor to Edw. P. Allis & Co., same place. (Model.) No. 371,542. Serial No. 246,885. Filed Aug 13, 1887.

**SPIRAL CONVEYOR.**—William C. Marr, Onawa, Iowa. (No model.) No. 371,609. Serial No. 240,344. Filed Sept. 24, 1886.

**ELEVATOR BUCKET.**—John Chivill, Chicago, Ill., assignor to the Webster & Comstock Mfg. Co., same place. (No model.) No. 371,549. Serial No. 237,533. Filed May 9, 1887.

**REGISTERING AND RECORDING SCALE BEAM AND WEIGHT.**—Edmund G. Fisher, Minneapolis, Minn. (No model.) No. 371,831. Serial No. 222,251. Filed Dec. 22, 1886.

**REGISTERING AND RECORDING WEIGHING SCALE.**—Edmund G. Fisher, Minneapolis, Minn. (No model.) No. 371,832. Serial No. 224,673. Filed Jan. 18, 1887.

**TOWING BOATS, ETC., IN CANALS.**—John M. Goodwin, Sharpsville, Pa., assignor of one-fourth to Irving A. Evans, Boston, Mass. (No model.) No. 371,680. Serial No. 206,895. Filed July 1, 1886.

#### Issued on Oct. 25, 1887.

**DRIVE CHAIN.**—Henry H. Doubleday, Washington, D. C., assignor to Joseph A. Jeffrey, Columbus, Ohio. (Model.) No. 371,929. Serial No. 128,573. Filed April 19, 1884.

**PLATFORM SCALE.**—Stephen J. Austin, Terre Haute, Ind. (No model.) No. 372,055. Serial No. 222,092. Filed Dec. 20, 1886.

#### Issued on Nov. 1, 1887.

**BAG HOLDER.**—John S. Hageman, Mansfield, Ohio, assignor of one-half to David N. Stambaugh, same place. (No model.) No. 372,411. Serial No. 214,681. Filed Sept. 27, 1886.

**BALING PRESS.**—Moses C. Nixon, Peru, Ind. (No model.) No. 372,636. Serial No. 221,530. Filed Dec. 14, 1886.

**BELT SHIFTING DEVICE.**—Alexander M. Dolph, Cincinnati, Ohio. (No model.) No. 372,523. Serial No. 220,080. Filed Nov. 27, 1886.

**MEANS FOR SECURING GLASS ELEVATOR CUP TO BELTS.**—Louis Rappaport, Breslau, Silesia, Prussia, Germany, assignor of one-half to J. Ebstein Sohne, same place. (No model.) No. 373,329. Serial No. 187,291. Filed Dec. 31, 1885. Patented in Germany Nov. 13, 1885, No. 35,542; in Luxemburg Nov. 30, 1885, No. 613; in France Dec. 4, 1885, No. 172,723, and in Norway Dec. 31, 1885, No. 520.

**GRAIN SEPARATOR.**—William C. Buchanan, Belleville, Ill., assignor to the Harrison Machine Works, same place. (No model.) No. 372,452. Serial No. 231,923. Filed March 22, 1887.

**GRAIN BOARD FOR WAGONS.**—John F. Daly, Philo,

Ill. (No model.) No. 372,522. Serial No. 245,871. Filed Aug. 1, 1887.

#### Issued on Nov. 8, 1887.

**BALING PRESS.**—William F. Denlis, Cottonwood, Cal. (No model.) No. 372,842. Serial No. 247,290. Filed Aug. 18, 1887.

**BALING PRESS.**—William E. Ellis, Rising Sun, Ind. (No model.) No. 372,901. Serial No. 243,622. Filed July 7, 1887.

**SCREW CONVEYOR.**—John S. Wilson, Chicago, Ill. (No model.) No. 372,950. Serial No. 211,160½. Filed Aug. 17, 1886.

**GRINDING MILL.**—Stephen P. Walling, South Edmeston, N. Y. (No model.) No. 372,726. Serial No. 221,201. Filed Dec. 10, 1886.

### TRADE AT PHILADELPHIA.

PHILADELPHIA, Nov. 10, 1887.

There has been a fair distribution of merchandise during the last four weeks, but no special activity was developed in any department. The fall trade in most lines has fully realized expectations, and, while a gradually declining volume of trade may be looked for during the next few weeks, business conditions, as a rule, encourage a hopeful feeling as to the future. The fall movement is keeping up in fuller volume in the South than it is in the Eastern Atlantic cities, but it shows a declining tendency in nearly all directions. The distribution, however, all things considered, is satisfactory in volume, and the general trade situation is much better than it was at the corresponding period last year, as the larger bank clearings and increased railroad earnings substantially attest.

The export demand for wheat has not improved, and speculative operators, who are influenced largely by the conduct of exporters, have given little support to the market. As a result of this condition of trade and of the continued liberal receipts in the Northwest, prices have receded ½ to 1 cent per bushel from the figures current a month ago. Late advices show that there has been a material reduction in the stocks of wheat in Liverpool during the last month, but, in the face of the indifferent foreign demand, statistical statements of bullish imports have little effect on the market. Free deliveries of No. 2 Red on account of November contracts and the unexpected large increase in the visible supply, in connection with a continued light export demand, have unsettled the wheat market during the present week. Transactions in options were chiefly in the nature of "switches" from November into December. High grades are scarce, and wanted by millers. To-day the speculative market continued dull, with no important change in prices.

Corn prices are a shade easier, but the large requirements of consumers and a continued good foreign demand have combined to prevent any material decline that might otherwise have resulted from a disposition on the part of speculators to discount the effect of an early marketing of the new crop. There has been very little trading in futures, and no important change in prices during the present week. Spot lots have declined about 1 cent per bushel under liberal receipts and a light local trade demand. To-day the market for spot lots was unsettled, and fully a ½ cent lower under liberal receipts, and a rather sluggish demand. Futures were neglected.

Receipts of oats have continued liberal, and the market has been quiet and a shade lower.

The question of trunk-line discrimination in the matter of export freight rates, is still under consideration by the Grain and Transportation Committee of the Commercial Exchange. The sub-committee recently appointed to collect evidence on the subject, and to confer with Exchanges of other cities with relation to the proper course of procedure in the matter, has received a number of letters assuring the hearty co-operation of the commercial organizations of New York, Baltimore and Boston in any action that may be taken by the Philadelphia Commercial Exchange. The recent announcement that the joint committee of the trunk lines and Central Traffic Association would shortly adopt a new schedule of export rates that would prevent a recurrence of the discrimination against Eastern shippers and receivers has had the effect of temporarily delaying aggressive action by the Eastern Exchanges. An idea of the character of the complaint against the railroad companies, which may yet take the form of charges before the Inter-State Commerce Commission, can be gathered from the remarks to a newspaper reporter recently made by Mr. J. H. Herrick, who is the



Chairman of the New York Produce Exchange Committee appointed to prepare the case for appeal to the Commission. Mr. Herrick said:

Our evidence is in perfect shape, and we are only awaiting the final action of the roads in the matter, which, if unsatisfactory to the demands of the situation, will send us at once before the Inter-State Commerce Commission. Copies of through bills of lading are in our possession for shipments of provisions, which include all terminal charges in New York, Philadelphia or Boston, at 27 cents per 100 pounds, through from Chicago to London or Liverpool, while the lowest rate that any sea-board merchant can secure for shipments from Chicago to any domestic port is 30 cents per 100 pounds, or 3 cents more per 100 pounds than the through rate to Europe for the same goods and from the same point of shipment. The effect of this discrimination on the exporting interests centered in this locality has been practically to kill them. Well-known brands of flour manufactured in Minnesota can to-day be brought cheaper in London than in the New York market as a direct result of export rate of discrimination, which admits of a cheaper delivery in London than in New York. One important fact we have discovered, and that is the special influence to which this export market is indebted for the present condition of things—the Pennsylvania Railroad Company. We have positive proof that this company has virtually subsidized a prominent steamship line plying between Philadelphia and Europe, and, as a natural result, the other lines have been compelled to meet export cuts forced upon them by the Pennsylvania rivalry.

The action of the trunk lines in carrying grain to Europe was again considered at a meeting held at the Commercial Exchange on Monday, Nov. 7. The subject of excessive charges and discrimination against Eastern consumers and receivers by the through-freight contracts was discussed in all its bearings at the meeting. The subject was finally referred to a committee to collect facts and evidence, with the view of further action by the members of the Exchange.

It may be a technical compliance with the long and short haul provision of the Inter-State Commerce Law, for the railroad companies to carry grain and flour on through bills of lading, from the West to Liverpool, as cheaply as they transport the same commodities from the same starting point to the Atlantic sea-board. They are not under compulsion to charge less for the short service than for the long haul, which includes the short haul, although they are not permitted to charge more. But the transportation of freight from Chicago or intermediate points to Europe at the price charged for carrying it from the Western shipping place to New York or Philadelphia, is a discrimination against the Eastern consumer or receiver, who pays not only the same rate of freight as the exporter, but is mulcted in the cost of terminal expenses not paid by exporters of through freight.

It may be doubted whether the railroad companies can stretch the "long haul" to include steamship transportation beyond the jurisdiction of the United States. But, in any event, it is evident that inland freight charges are excessive; and being so, they are a proper subject for complaint to the Inter-State Commerce Commission. The merchants who feel that their business has been injured by this discrimination in favor of through shipping, should test the efficacy of the law in its present shape before they advocate the remedy of additional legislation.

Correspondence between Philadelphia shippers and merchants in Bristol, England, indicates a growing interest in the scheme to increase the steamship facilities of this port. The completion of a covered dock and railroad track connections, for the accommodation of transatlantic general cargo business at Port Richmond, is the basis for the general belief that negotiations are on foot, looking to the establishment of a new line. Rumor connects the Dominion Line of steamers, formerly operated by William Brockie at this port, with the negotiation. Parties in a position to know, however, deny that any definite arrangement has yet been made with that or any other company. No doubt is entertained in shipping circles, however, but that some outcome of the development of terminal facilities at Port Richmond is extremely probable in the near future.

Trimble & Howell, grain receivers and shippers of this city, have established a branch house at Indianapolis, under the firm name of Trimble, Howell & Co., of which Charles E. Culpepper, who has been identified with the firm here, will be manager.

The Maritime Exchange is vigorously urging the removal of Smith's and Windmill Islands. They declare

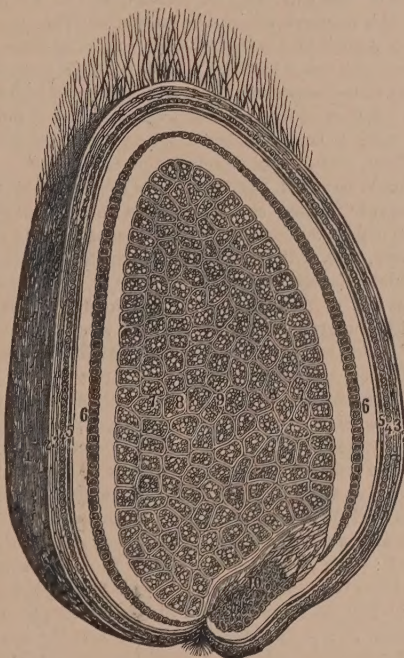
that "there are but two alternatives—to go ahead and get these snags out of the way of the shipping interests of Philadelphia, or else sit still, supinely, and see the commerce of the city drop away to enrich other ports."

There is very little demand for grain freights, and offerings of tonnage are light. Steamers are nominally quoted at 3s. 3d. for prompt loading for Cork for orders, and direct Continent, Liverpool and Glasgow berth rooms in regular line steamers, quoted at 3½d.

J. C. D.

### THE WHEAT BERRY.

The annexed engraving of a grain of wheat, magnified fifteen diameters, with a description of the component parts thereof, is furnished by Mr. Anton Schwarzwaelder, of the A. Schwarzwaelder Mfg. Co. of Belleville, Ill. The first coatings, from 1 to 4, are light, hardly colored at all, and embracing three hundredths ( $\frac{3}{100}$ ) of the



weight of the grain. They are very fragile and are easily pulverized, and can be readily removed by good cleaning machines.

Coatings 4 and 5, which contain a little flour, from the bran particles. Layer 5 is of an orange color, and pretty tough as well as firmly cohesive with the parts that touch it; also, it is a little sticky and surrounded by cerealine.

- |                        |                      |
|------------------------|----------------------|
| 1-2. Epidermis (Husk.) | 6. Gluten Cells.     |
| 3. Fruit Cover.        | 7-8-9. Starch Cells. |
| 4-5. Seed Cover.       | 10. Germ.            |

These coatings and germ, 10, exert the most damaging influence on grinding. The layer is represented as separated from the parts adjoining, in order to protrude more clearly. It is colorless and composed of cells that contain flour less white, but more glutenous.

The layers, 7, 8 and 9 designate the whitest bulks of flour which, simultaneously, contain the largest amount of starch. Such flour, originally appearing under the form of middlings (as also that contained in layer No. 6) is comprised in a considerable number of cells which are surrounded by a texture or a sort of a web. Now, the latter not being as white as the middlings, or flour itself, it is advisable to spare it in the milling process. But even more to be taken care of is the mother germ (embryo) which contains some oily particles that ought not to be mixed with the flour.

### CORN AND COB MEAL.

To get the full benefit of feeding corn and cob meal to animals, it must be ground to a fine flour, thus liberating all the nutritive qualities contained in both grain and cob. A good authority of this subject says, that when the cob is finely ground, it is evenly mixed with the corn meal, and that taken thus into the stomach of the animal it separates the concentrated food of the cornmeal, is made more porous and easily digested, and thus keeps the animal in better health than when fed on pure corn meal.

Corn tends to produce fat rather than milk, and as a food for cows it is inferior to oats, barley or mill feed.

### FUTURES IN WHEAT.

[By Albert C. Stevens in *Quarterly Journal of Economics*.]

Trading in contracts for the future delivery of wheat has grown to large proportions in the United States of late years. And, when attempts were made during the past summer to corner the wheat market at Chicago and at San Francisco, the enormous amount of capital so employed, and the predominance of speculative activity at those cities, naturally drew unusual attention to what has been described as gambling in our chief food staple. Leading newspapers throughout the country roundly denounced the speculators for the derangement of trade and the abnormal prices resulting from attempted corners, and, as so often in the past, called in question the legality as well as the morals of what is known as "the future contract."

The future contract is the agreement, often erroneously called an "option," by which the seller binds himself to deliver a certain quantity of wheat at a specified price at a date named. The form for these contracts, in use at the New York Produce Exchange, is as follows, grain contract—"future."

NEW YORK.....18..

In consideration of \$1 in hand paid, the receipt of which is hereby acknowledged.....have this day sold to (or bought from).....bushels of.....New York inspection, at.....cents per bushel, deliverable at seller's (or buyer's) option.....18....

Signed,.....

This contract is made in view of and in all respects subject to, the by-laws and rules established by the New York Produce Exchange.

If the contract be for 8,000 bushels of No. 2 red winter wheat, September delivery, the "option" consists in its resting with the buyer or the seller (whichever the contract specifies), to say on what day in that month the delivery shall be made.

Let us suppose that a general storekeeper or a local grain buyer has received at Parsons, Kan., in odd lots, or has been through the country and bought some 16,000 bushels of wheat, and has had it delivered at the elevator alongside the railway. The farmers in Labette and surrounding counties in Kansas presumably take the Parsons *Sun*, and, in addition to keeping themselves informed as to the price of wheat at Chicago and New York daily, are familiar with the market price of wheat at Parsons. The latter depends primarily on quotations at St. Louis, and indirectly on those from New York, winter wheat markets; for winter wheat is raised in Kansas. The Parsons price is nominally the St. Louis price, less the cost of transportation thither. The local shipper believes that his 16,000 bushels will grade No. 2, New York inspection, and has paid, on an average, about 54 cents per bushel for it. We will further suppose the cost of shipment to New York to be 25 cents per bushel. It is August. The late "iniquitous speculation and attempted corner at Chicago have killed trading in wheat," and the price at New York has fallen to 80 cents, with the market likely to drag for some time; but telegraphic report reveals a more active market at New York, with an advance of 1½ cents. Thereupon this speculative wheat buyer wires a New York grain commission house to sell for his account, September delivery, 16,000 bushels of wheat, and proceeds to load his grain into cars and send it to New York to meet his contract. The New York merchant goes upon the floor of the Produce Exchange and sells (by contract) for September delivery, 16,000 bushels of wheat, which particular grain is at that moment in a little elevator out in Kansas. The purchaser of this wheat represents an English house, which imports wheat to sell to millers in the United Kingdom. The Parsons merchant sold when he did on a "bulge," believing that the general outlook for the next six weeks favored a low and dull market, and wishing to get the benefit of the temporary advance. The exporter bought when he did on a direct order from the firm abroad. But within two hours of twenty-four hours the exporter, finding ocean freights tending downward, seeing also a prospective decline in prices, and believing that he will be able to make better arrangements for export at a later day and still meet the wants of his principals, sells 16,000 bushels of wheat—this particular 16,000 being in mind—to a New York miller, who, for reasons of his own, wants it. A day later—or, perhaps on the same day—the miller, finding a fractional advance in prices and aiming at a subsequent purchase to supply his mill, in turn sells 16,000 bushels of wheat for September delivery. It is purchased by a member of the Produce Exchange, because he "thinks it cheap" or for "purely speculative reasons,"



who disposes of it, either at a small loss or profit, to another "scalper," and so on, until sales have been made perhaps twenty times.

This brings us to a consideration of the means by which future contracts are closed out in actual practice. All future contracts (New York and Chicago) contemplate the actual delivery of the grain, and they may be closed out only in one of three ways:

1. By the actual delivery of the grain, which may be by elevator or warehouse receipts or by the moving of the grain alongside, if from commission merchant to exporter. Under this head, too, comes the system of delivery on what are termed "transferable orders." The contracts on the New York Produce Exchange read, we will say, "sellers' option," which refers to the day on which the grain shall be delivered. In the case of repeated sales of 16,000 bushels of September wheat given above, suppose the actual wheat arrived at New York Sept. 10, and that the final buyer in the list of, say, twenty who had been trading in it, an exporter, having freight room engaged, wants just 16,000 bushels to make a cargo. By means of a transferable order, the merchant who first sold the 16,000 bushels, September delivery, and to whom the wheat was consigned, delivers the wheat to the twentieth man in line, each of the intermediate traders signing it and passing it along in succession. In this way all the "trades" between the original seller and the last in line are wiped out by each of the pairs of buyers and sellers paying one another "differences," as compared with the "settlement price" established each day.

2. By indirect settlement, which may be described as delivery by clearing the contracts. We may suppose that the New York merchant who first sold the 16,000 bushels of September wheat received, soon after, a cable order to buy 16,000 bushels of September wheat. He encounters the man to whom he had previously sold that quantity (contract not yet expired), and buys 16,000 bushels of wheat, September delivery. When the wheat arrives at New York the two transactions referred to may be settled by cancellation. A sold to B, and be to A, both for September delivery. In theory, A would have to deliver the wheat to B and receive a check, whereupon B would deliver the identical wheat back to A, and receive A's check; but this uncalled for friction is avoided by the simple process which suggests itself to men everywhere and in all lines of business.

3. By indirect settlement, technically called "ringing." The word suggests "rings" and "corners," but its application in this instance is entirely devoid of offense. The process may be best explained by further reference to the supposititious sales of 16,000 bushels of Kansas wheat, where A sold, September delivery, to an exporter, he to a miller, the miller to speculator, the latter to another, and so on until there were, say, twenty firms or individuals in line. Now let it happen that A receives an order to buy September wheat, and in doing so gets it from the twentieth man in the line just described. By this act, the like of which may and does frequently happen, a "ring" is created, and if all parties in interest so elect (it being optional with each of them whether to ring out or not) all the contracts may be settled by the payments of differences, based on the settlement price as described in the case of transferable orders; and this appears to be an actual delivery, too. A sold actual wheat, and was bound and intended to deliver it. Upon his ability to keep his contract nineteen other trades depended. The last buyer, in the course of business, became a seller to the first. Would it make the method of settlement any more legitimate if A actually turned over his wheat to B, and B passed it on to C, and this was kept up until the twentieth buyer received it and handed it over to A again?

Those who merely desire to indulge gambling proclivities by speculating in grain may as well stick to the bucket shop. It is true that such a one may buy and sell at the Produce Exchange, and collect his profits or contribute his losses through a commission house or brokerage concern; but let us note where he would land if he, as principal, proposes to "scalp for eighths." Suppose A to be a member of the New York Produce Exchange, who regards future trading as "bets on the market price," a mere collection or payment of differences, with no grain to be delivered or received. He buys 8,000 bushels of December No. 2 red wheat, say at 83½ cents, and within an hour sells it at 84 cents, making an apparent profit of ½ cent per bushel, or \$40. Following his steps, under the rules of the Exchange, it is found that he first buys at 83½ cents from B & Co., who are selling for London account, to protect purchases of California wheat in transit. Under the rule, B & Co. call the buyer 10 cents per

bushel,\* original margin, or \$800, to be deposited to protect the contract. Second, A sells at 84 cents to C & Co., capitalists, who, on the basis of the purchase of December at 84 cents, sell January at 85½ cents, so as to secure carrying charges of 1½ cents for the month. C & Co. also call \$800 (or \$400), original margin; and such margins must be put up within one hour from the time when called. A now has two open contracts for December, a purchase from B & Co. and a sale to C & Co., and has up \$1,600 (or \$800), original margin, on which he receives interest at the rate of 2½ cents per annum, although the money is worth to him 6 per cent. He is therefore losing 3½ per cent. interest on the amount of his margins until the contracts are liquidated. A is also obliged to put up additional margins, in case the price advances or declines while the contracts are open. If the price advances 5 cents, he has to put up \$400 additional margin with C & Co. If it declines 5 cents per bushel he has to put up a like sum to protect B & Co. If B & Co. make no trades meanwhile that will "ring out" with C & Co., and so let A out, this money is kept up as margin till Dec. 1, when B & Co. deliver to A a load of wheat at 83½ cents, and A at once delivers it to C & Co. at 84 cents, adjusting the contract to the settlement price, which may be higher or lower. A then realizes his \$40 profit, less loss of interest on his margins, and discovers that he actually bought and sold wheat, and did not merely bet on the market.

It should be added, particularly for the benefit of those who regard "futures" as excuses to bet on prices of grain, with no expectation on the part of buyer or seller to make a delivery, that, if the grain due on such a contract be not tendered (sellers' option) before 1:30 P. M. of the last business day of the month, the purchaser notifies the committee on grain to buy it in for his account at public "call," which is done. The grain so bought in is then a good delivery on maturing contracts that day.

The most important, because the most necessary, commodity traded in is the chief food staple of civilized communities, wheat. A broad view of the equities of trade in this line must place special emphasis on the need for all natural or artificial aids or devices tending to cheapen the cost of flour to the consumer. When society in leading wheat-consuming countries was more primitive than it now is; when general distribution, in some instances over a series of years, was not equal to home requirements; when the farmer carried his grain to the banks of the nearest river to find the miller who met the local demand for flour and shipped a surplus so the neighboring town; in short, when there was little, if any, need for large stocks of wheat or for "centers of distribution," as we now understand the term, then it was that Produce Exchanges and Boards of Trade were unknown, and the existing form of future contracts in grain had not made its appearance.

But with increase of population, changes in currents of trade, exhaustion of soils, the rise of competitive industries, the enormous reduction of the cost of transportation, and the cultivation of new and fertile areas of soil, certain countries found themselves producing less and less wheat, and others raising far more than they could consume. Thus, the United Kingdom with 37,000,000 population and a wheat crop of about 75,000,000 bushels per annum, has to import about 145,000,000 bushels for food, beside maintaining stocks. This requires an average of about 12,000,000 bushels of wheat monthly from other lands. Elaborately devised machinery for buying wheat at a moment's notice in the cheapest market, so as not to overstock in the face of possible declines in prices, is now an absolute essential; and, with it, the United Kingdom and other countries successfully wrestle with starvation. Harvest seasons are widely distributed throughout the year. Australia, New Zealand, Chili and the Argentine Republic (moderate exporters) gather their wheat in January; Egypt, Persia and Asia Minor, in April; California and Oregon, Kansas and Missouri, in June; Austria-Hungary, Southern Russia, Dakota, Minnesota, Wisconsin, Nebraska, Iowa, Illinois, Indiana, Michigan, Ohio and Canada, in July; Manitoba, in August, and Northern Russia, in September and October. It is comparatively within recent years that United States, India, Russia, Australia and New Zealand have found themselves competitors in supplying the chief importing countries. Surplus yields are now coming into sight in different quarters of the globe at different seasons, and in quantities which vary from year to year with the conditions governing growth. This has developed the great grain markets like Bremen, Hamburg, Lisbon, Paris, Marseilles, London, Liverpool, Bristol, Glasgow, Odessa, and St. Petersburg, Bombay, Kurrachee, and Calcutta, Mel-

bourne and Sidney, New York, Chicago, Cincinnati, St. Louis, Toledo, Philadelphia, Baltimore and New Orleans.

The grain trade at these cities is responsible for the large and growing task of securing the surplus wheat in exporting countries, transporting it to centers of distribution, grading and storing it, or for placing such a share of it as may be spared in that portion of the world where it is most needed. In importing countries they seek to secure wheat in the cheapest markets, without so supplying themselves that a decline may find them overstocked at relatively high prices. Hence the necessity for a most important statistical work—that of obtaining the latest information concerning crop prospects, harvest returns, qualities, and acreages; stocks of wheat "in sight" at principal points of storage in the more important grain exporting and importing regions; receipts of grain at interior towns and at shipping ports, stocks exported, stocks afloat and arrived out, and a multitude of other facts tending to fix the actual value of wheat. No small share of this information is that relating to ocean shipping, berth-room, and charters available at various ports, the quantity of tonnage on the way thereto, the prospects of return cargoes, and much else influencing rates of ocean freights, and in turn aiding to determine the price of wheat at Liverpool.

This work has to be done that the world may be fed regularly and cheaply. The machinery necessary to its accomplishment has not been developed in a day; and there is, undoubtedly, still room for growth and for improvement of method or detail. But in view of the intricate problems entering into the work of securing, "carrying," and distributing surplus wheat from various portions of the globe, briefly outlined above, it appears almost a self-evident proposition that the work in hand cannot continue without contracts for future delivery.

Wheat stocks in the United States are from seven to ten days from Liverpool; those in Russia may be conveyed to English ports in from twenty to thirty days; supplies at ports in India are a thirty days' voyage from London; those from the Argentine Republic require ninety days, and from Australia and California about five months. The requirements of English and Scotch millers are for various qualities; and British importers must continually keep in view the amount of home stocks, the relative wheat harvests, and general quality of the yields in exporting countries, the fluctuations of prices abroad, and the tendency of prices the world over, in view of generally large or small yields in later years, not omitting temporary or local influences in any large market, due to weather reports, attempted corners, "cut rates" of transportation, and the like. This leads directly to some distinctly economic uses of the future contract, to emphasize which illustrations from actual transactions will be useful.

A Glasgow miller, in February last, desired to purchase 100,000 bushels of California wheat to grind into flour. The price had been tending upward, due in part, perhaps, to some of the earlier movements of the late wheat corner at San Francisco. He purchased 100,000 bushels of California wheat, engaged freight room, and had it shipped to Glasgow. We will say that the price and freight would make the wheat cost him in Glasgow about \$1.07 per bushel. But this wheat would not arrive out until September or October, five months away. By that time, following the Atlantic coast harvests, and with the then probable renewal of arrivals of Russian and Indian wheat, the Glasgow price might or might not be lower than \$1.07. In order to insure himself against loss, the Glasgow miller sold 100,000 bushels of wheat for October delivery at New York.

The California wheat arrives at Glasgow, but the price of wheat the world over has declined, and the miller finds that it has cost him 2 or 4 cents per bushel more than the then ruling prices. Under strictly old-fashioned methods, had he not sold 100,000 bushels of October wheat at New York, he would find himself at a decided disadvantage in competition with millers who had not anticipated their wants as he had. But he is not so placed. When he found the market a few cents lower (the world's chief markets, under normal conditions, being on a parity one with the other), he cabled an order to New York to buy 100,000 bushels for October delivery. At the maturity of his New York speculative contracts he finds a profit about equal to the loss on his California transaction. So that, notwithstanding he bought 100,000 bushels of wheat at a cost of \$1.07 delivered, he in reality gets his wheat at \$1.03 to \$1.05, owing to his protecting future contracts, the price last given being, we will say, about the ruling



quotation at the date of the arrival out of the consignment from San Francisco. Had he found a profit on his California wheat when it arrived—that is, had the price advanced 3 to 5 cents per bushel after the grain left San Francisco—he would have covered his New York sale at a corresponding loss, thus leaving him situated as before. In this way English millers and importers of wheat, buying in the United States, Russia, India, Australia, or elsewhere, habitually protect such purchases from fluctuations in price, while in transit (one to five months), by selling futures against them at New York or Chicago, and later by covering their contracts. And, when we consider that wheat export purchases made in this country, in Russia, India, and other parts of the world aggregate some 250,000,000 bushels per annum, and that a very large proportion of the isolated purchases are sold against in New York and Chicago, so that they cost the buyers no more delivered than a decline while in transit may entitle them to, and that all of these sales are in time covered by corresponding purchases of wheat, and that in all cases these "speculative" sales and purchases call for the actual delivery of grain, we may gain some conception of the reasons why future sales make so large a total every year.

[TO BE CONTINUED.]



N. P. Bowsher of South Bend, Ind.: "Trade has been very good the past two months, especially in the grinding mill line. I have been pressed to fill orders, but have made arrangements to increase my output, and any miller or elevator proprietor looking for a feed mill should get my circulars."

The "Eureka" grain cleaning machinery has a seemingly regular habit of winning premiums whenever it is placed in competitive exhibition. Its manufacturers, Howes & Ewell of Silver Creek, N. Y., were advised by cable Oct. 22 that their exhibit at the American Exhibition in London had carried off the highest honors.

The Jeffrey Mfg. Co. of Columbus, O., having lately gotten control of the Hey and Oborn patents, beg leave to announce to the public that they are now ready to supply the market in several numbers and strengths of the Hey-Oborn Detachable Chain Belting, and will be able to supply all sizes and strengths in a comparatively short time. Parties wishing to place orders for chain belting will do well to ask the Jeffrey Mfg. Co. for samples and special circulars.

The machinery of P. D. Armour's new elevator on Goose Island at Chicago will need a driving belt 5 feet wide and weighing two tons. There is only one other belt in the country as large. The largest solid belt in New England is used in the Richmond Paper Mill. It is 4 feet wide, of three thicknesses, 103 feet long, and weighs 1,200 pounds; 1,000 hides were picked over to get leather enough for its construction.

Williams & Orton Mfg. Co. of Sterling, Ill., manufacturers of the Charter Gas Engine, write us: "Gas engines are booming, and the boom is not going to let down, like many do. We haven't an engine of any size in stock, and orders are several weeks ahead of us, for running grain elevators, printing presses, hoisting elevators, with the gasoline attachment on most of them. We shipped three 'Sterlings' and another under-runner last week, which we consider very fair as we are not advertising our mills. We have some 30-inch under-runners that will go very low if sold before Jan. 1, 1888."

Mr. James Black, a practical kilnman of Dumfries, N. B., has invented and patented a new machine for drying all kinds of grain. It consists of a large, rectangular, iron case, 14 feet in length, inside of which are fitted four wire revolving cylinders, extending the whole length of the case, which is filled with heated air supplied from a furnace beneath. The damp grain, which is fed in from the top, flows from cylinder to cylinder, and coming in contact with the hot air, is gradually dried before it reaches the bottom, where it is discharged. An exhaust fan expels the moisture as it rises from the grain. No manual labor is required from the time the grain enters the machine until it is discharged, thus saving the loading, unloading and turning, which often have to be per-

formed by manual labor under great heat. The grain is in continual motion, moving from one end of the cylinders to the other, thus insuring a thorough dryness throughout. The steam from the grain gets away at once, so that it does not come in contact with the dried grain, as in the old-kiln system. This secures easier shelling and much better flavor. The motive power is practically small, as the motion is slow, and the cost of heating will save, it is said, about 50 per cent. The machine can be made to dry any quantity by adding to or taking from the number of cylinders.

Belting manufacturers have agreed upon an advance of ten per cent. in the ruling prices of their goods. The reasons for this action are, that while the demand for belting is very active, the supply of material out of which the best qualities are made, is less than usual. Belting butts, which are the parts of the hide selected for the manufacture of first-class belts, are so scarce there it has been necessary in many cases to use clear side sole leather, which does not answer the purpose near so well, but which has advanced in price since the demand for it has increased. Prices will not be raised beyond what may be necessary to meet the advance in the cost of material.

The question of threshing corn from the shock has been considered for several years by the agricultural world, and a solution seems to have been reached at last. Experiments have recently been made in Minnesota and Iowa with much success. The *News* of McGregor, Iowa, gives an account of a test made on the farm of Mr. Robinson, near Volga, that state, which was highly satisfactory. The concaves of an Upton machine—a regular grain thresher—were properly arranged, and a slight change made in the teeth of the cylinder. The shocks of corn that had been cut up for fodder were hauled by teams and unloaded to the machine, where the stalks were fed in like any other grain, the corn coming through at the rate of seventy-five bushels of shelled corn per hour, and even at this rapid rate two teams could not get the shocks in fast enough. In this way the expense of shelling and husking is saved. The stalks are shredded so that nearly all of it can be eaten, and the cobs are broken up in short pieces and mostly worked out of the chaff spout. The machine requires more power to thresh corn than any other grain, and really more than an ordinary horse power can furnish. The motive power in this case was furnished by a traction engine. This process of threshing corn will prove of incalculable benefit to farmers.

### WHEAT IN MANITOBA.

A statement issued by the Board of Trade places the yield of wheat in Manitoba this year at 12,000,000 bushels, and the average yield at 28 bushels to the acre. The total amount to be derived from produce to be exported is estimated at \$7,000,000.

### TRADE IN THE SOUTHWEST.

[Special correspondence AMERICAN ELEVATOR AND GRAIN TRADE.]

KANSAS CITY, Nov. 12.—Elevator men are kicking a good deal in this city because of the charges of grain inspectors. Every time an elevator is inspected there is a charge of \$1 made to the elevator. Of course this is a small amount on itself, but when it is considered that these inspections are made many times during the year, the total cost of this tax is not small. It is suggested that this cost of inspection should be paid out of the general Board of Trade funds, as all parties are about equally interested in these inspections who have anything to do with the buying or selling of grain. The complaints have not been as yet officially acted upon, and it is extremely doubtful if anything will be done this year, at least, to remedy the trouble.

The new Board of Trade building, which is to cost more than a half a million dollars, is fast nearing completion so far as the outer walls are concerned. It is thought that the same will be under cover before the cold weather has fairly set in, so that work on the inside can be continued through the winter. If this is done there will be no trouble in having the same completed, ready for occupancy before next fall, and, perhaps, earlier.

Several representatives of houses who make a specialty of putting up grain elevators, have been in the city the past month. One of these gentlemen tried his best to get parties sufficiently interested in the business to form a company to put up a new elevator at this point. After working faithfully with the powers for ten days without success, he left in disgust. The people here know, prob-

ably as well as anybody, that elevators for Kansas City are not a paying investment just now. To be sure those already in operation have managed to pay small dividends, but there is not one of them but would be glad to find a purchaser for the plant, and use the money buried in it in some more profitable calling. Later, when crops begin to be plentiful throughout the neighboring sections, and when all the elevator men adopt a more liberal policy toward attracting trade to center here, there will be a bonanza for the elevator men. As yet not even the small cloud is to be seen, and we have been searching the horizon for a good many months for the little sign without any hopeful results.

So far as regards a more liberal policy in the present state of the market, it must be stated in justice to elevator men, that owing to the extremely light offerings just now, the same would not be practicable. There is not enough wheat and corn coming here just now to cause even a ripple of the sea of trade. If a policy ever so generous were adopted, it would make no difference. The grain is not in the country, and would not, of course, come to hand. However, the lessons of the past three years have had their effect, and it is evident that there will be a change for the better so soon as the time calls for it. I have been told that it was ill-advised to preach against the peculiar methods of inspection in vogue here just now, especially when it cannot be remedied from the very nature of trade just now. It must be remembered that deficient inspection laws in this city have been preached about for three years past. The text was not taken at a time when there was no wheat in the country. It was pointed out at a season when there was a good chance to get large consignments from the neighboring sections. We tooted to the powers behind the elevators, and they failed to dance to the toot. To be sure we did not perform entirely according to the best ideal of time, but the elevator men recognized the justice of the tune, and should have remedied their steps as soon as possible. It is all right to claim that the time was not ripe. The question which interested the grain men in the country was not whether the time was ripe, but whether there was to be an improvement, and it interests them now just as much, although they have precious little grain to offer on the present market.

Reports of the stand of winter wheat are encouraging from all sections of Kansas and Missouri. So far the outlook could not be better. The acreage is by no means the largest ever noted in these states—who could expect it after the experiences of the past two years?—but it is sufficiently liberal to give hopes of a large surplus. This is the main point, and if this is assured there will be a boom in elevators next year such as has not been witnessed in this section for years.

There are liberal shipments of wheat being made into the state of Kansas from the North just now. Those grain men who consented to sell their offerings at Chicago and other Northern points, are now regretting their premature action. If they had only held on, they could have gotten their own prices right at home, and realized many times the per cent. they did by shipping so early to other points. Yet this is what the same men will do next year, even if the crop is not so large as it was this. They are anxious to turn over their money, and will not consent to quietly sit by and let their holdings make money for them more quickly than they could in any other way. Why is it that it is thus?

There have been but 10,126 bushels of wheat received during the past month. This makes the amount in store at the present writing 415,329. The shipments during the month have been the lightest in the history of the market for the past seven years. A better idea of the falling off may be obtained by comparison of receipts for the two previous years. For the four weeks in 1886, 327,341 bushels were received, and for the same time in 1885 331,757 bushels. With such a decline of offerings staring the elevator men in the face, there is cause for no wonder that they feel disheartened just now. The total receipts to date during the year have been 980,666 bushels as compared to 2,036,064 for 1886, and 3,283,084 for the same time during 1885. No additional remarks are necessary in the face of these figures to show the immense decline that the wheat interests have suffered within three years. There have been fewer sales of wheat during the month, as would be naturally inferred. No sales for speculative purposes are noted, all transactions being bona fide ones for actual consumption. At present No. 2 soft wheat sells slowly at 65 cents. A sale of No. 2 red has not been made for so long on the Board of Trade that it would be useless to quote the ruling prices, which are



founded entirely upon those at Chicago, with the difference of freight added.

With reference to corn, there is no better showing to note. For four weeks the elevators here have received but 13,969 bushels, as compared to 97,082 during the same time in 1886 and 97,337 in 1885. The total received to date for the year has been 880,143 bushels, as compared to 1,706,057 bushels during 1886 and 2,683,890 for 1885. The crop was so small this year all through this section, and the farmers had cleared out their available supply so far that they have been forced to keep what little they could get off their farms at home in order to winter their stock. It is not expected that the near future will see any great improvement in offerings, although some state that there is more corn in the country than is generally supposed, which will find its way to market the first of next year, or as soon as the farmer is assured that he will not need the same for his livestock. The visible supply in the city is exceedingly small, and is growing less every day, the receipts being less than the shipments; but 36,318 bushels are in local elevators just now. No. 2 cash brings readily 35½ cents per bushel, while 37½ cents are asked for No. 2 white with no sales, buyers thinking the price too stiff and not warranted by quotations at other leading points. Owing to the small amount on hand, a good many of the local consumers are buying their corn direct from the country, and do not handle elevator corn at all. To get enough to supply even this demand makes it necessary to do a good deal of tall rustling.

Oats is the only grain which shows any improvement so far as receipts are concerned. There are just now 143,289 bushels in the elevators, and wherever it will do consumers are using this cereal in place of corn, they considering it relatively cheaper. During the past four weeks there have been 99,077 bushels received, as compared to 42,082 last year, and 47,963 bushels for the year before. Up to date this year 394,959 bushels have been received, while last year but 284,079 bushels came to hand, being 113,986 bushels in excess of offerings for 1885. No. 2 cash oats sell at 22 cents per bushel at present.

Rye never was a leading cereal at this point, nevertheless the receipts of the year show a decided falling off from previous ones. Not a bushel has been brought into the elevators the past four weeks, and the total receipts for the year to date are 3,632 bushels, as compared to 3,632 last year, and 8,585 the previous one. The total receipts for this year have been 9,798 bushels, when, during the same time last year, 21,196 bushels were brought here, and in 1885 128,596 bushels—a great falling off, sure. With reference to the above statement of rye, it must in justice be said that there is a good deal sold in this market which does not reach the elevators, and it would not be right for outsiders to think that the above figures denote all transactions in this cereal. All the local brewing houses buy direct from the country.

### THE CROPS OF ONTARIO.

The following items are taken from the November report of the Bureau of Statistics for Ontario, Canada. The yield of fall wheat is 14,440,611 bushels, being 3,630,531 bushels less than last year, and 5,162,693 bushels less than the average of six years. The berry is small but hard; and while some correspondents say it is below the standard weight, others claim that the hardness and soundness of the grain fully compensate for its lack of size. The average yield per acre is 16 bushels. Spring wheat may be set down as a general failure, for while a few good fields are reported, the common result is a small yield of inferior quality. The estimated yield is 5,633,117 bushels, against 9,518,553 last year, and 9,713,879 for the average of six years.

The barley crop, while good in quality, is light in weight and the yield per acre less than for any harvest in the last six years. The local product is 17,134,830 bushels, which is 2,377,448 less than last year, and 2,031,583 less than the average of six years. The oat crop, owing to the hot, dry summer, is below the average in yield and light in the measure. The estimated product is 49,848,101 bushels from 1,682,453 acres, against 58,665,608 bushels from 1,621,901 acres last year.

It is thought that the surplus wheat of Manitoba will about make good the deficiency in Ontario and Quebec and the lower provinces. Canada as a whole will have very little, if any, surplus, and indeed may have to import wheat from the United States to a limited extent.

A native of New South Wales is known as a "corn-stalk" because the men generally grow thin and tall.



[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

### IMPROVED METHODS.

*Editor American Elevator and Grain Trade:*—Please send me the AMERICAN ELEVATOR AND GRAIN TRADE, for which I inclose you one dollar. The superintendent of the Erie Elevator at Jersey City was kind enough to refer to your paper as the best published.

I wish to know of the latest improved elevator methods with addresses of builders.

Yours truly,  
Thos. H. Post.  
Wilmington, N. C.

### GRAIN TABLES.

*Editor American Elevator and Grain Trade:*—I am in want of a grain table, a book where the amount of bushels at any given price is figured out to save the annoyance time and possibility of error. If you know of such a book, please let me know.

Yours,  
Fredonia, Wis.  
EWALD A. SCHEUNERT.

[Fisher's Grain Tables, a small, handy book that can be carried in the pocket, would probably meet our correspondent's wishes.]

### THE PNEUMATIC SYSTEM.

*Editor American Elevator and Grain Trade:*—I notice in your excellent journal that a great deal is being said about the Pneumatic System of transferring and handling grain. Can you give any information as to the cost and practical working of the system, and whether it can be used in small plants in place of the old system of belting and cups. I want to change my building soon and put in the latest and best improvements.

I find your journal keeps me posted and up with the times, and would not do without it for twice the cost.

Yours truly,  
West Point, Ill.  
G. I. BAILY.

[The Pneumatic System is a success, as the building of the large "Cyclone" has demonstrated. Its adaptability for small plants, at a moderate cost, yet remains to be proved.]

### MINNESOTA WHEAT INSPECTION IN WISCONSIN.

Duluth grain men are very indignant over the recent order of the State Board of Warehouse Commissioners directing the Duluth inspectors to go to Washburn, Wis., a place 100 miles outside the state, and inspect out wheat cargoes. The situation, according to the Duluth people, is this: Considerable wheat has been shipped to Washburn, going through St. Paul, and a part, at least, of it, receiving Minnesota grades there. It has then been sent to the Washburn elevator, which is leased by F. H. Peavy of Minneapolis, from whence it is sent out with the Duluth grades attached and as Duluth wheat. The house does not come under the state law, and is not bonded to preserve its wheat as it goes in, and the elevator authorities can mix wheat if they so desire. This is what galls the Duluth men the worst. They say they have been for years building up a market for Duluth wheat, and now that it is established, another and outside interest is reaping the benefit of it. They denounce the whole thing as a scheme in the interest of Minneapolis men, who, because they cannot sell their wheat at the east on Minneapolis grades, cause it to be inspected and shipped as from Duluth. The members of the Board of Trade are much worked up on the subject, and declare it to be an outrage on shippers and producers, giving outside elevators all the benefits of the established inspection at Duluth, without any of the checks and liabilities. Secretary Wells says: "It is a very bad thing. The Washburn elevator is a mixing house, known as such, and the commissioners are discriminating against their own state and market. They might as well put inspectors at all the ports and give the stamp of Duluth wheat to any stuff. If they do

not revoke their action, the Board will undoubtedly enjoin them and see what they will say."

On the other hand, the commissioners say they see no cause for complaint; that the wheat at Washburn is kept in separate grades, and that a certificate showing Minnesota inspection is placed on every lot, and if the board see that the inspectors do their whole duty and do not allow the grade to be lowered, they do not see how Duluth is to be injured. Gen. Becker of the commission, says:

"The wheat is Minnesota wheat, which has either been inspected in St. Paul or Minneapolis, and belongs to Minnesota parties. They wanted it shipped out and were desirous of having a state inspection of it. Accordingly they made application to the state board to have an inspector go there and inspect it. The Board gave the matter some consideration, and finally concluded that, while it had no authority to send inspectors outside the state, it was a service that would do nobody any harm, and under the circumstances we might send an inspector and weigher there who would inspect and weigh the wheat out and issue certificates therefor. The certificates should state that the wheat had been inspected and weighed out of an elevator at Washburn, in the state of Wisconsin, by a state inspector and weigher under the same rules and regulations that were in force elsewhere in this state respecting Minnesota grades. I don't see why there should be any excitement over the matter."

The Duluth Board of Trade have, however, adopted a strong protest against the proceedings, and asked the commissioners to at once rescind the order.

### RAT-PROOF CORN CRIBS.

N. J. Shepherd writes to the *Prairie Farmer*, that after he had been unable to exclude rats from his corn crib by ordinary means, he lined it with hemlock plank six inches wide, and covered the floor and ceiling with the same material, placing the plank about one-fourth of an inch apart. Not a rat has found its way into the crib since. Mice, however, have found entrance; they seem to be able to gnaw hemlock, while rats cannot. To exclude these he would lay the floor with plank from four to six inches wide, with inch spaces between them to admit ventilation for the corn, and then cover the whole with woven wire with meshes, which mice cannot pass. Nail on the inside of the studs woven wire strong enough to resist the pressure of the corn, and with meshes to exclude mice. Then nail woven wire on the cross pieces overhead. The floor wire and that overhead need not be very heavy. Such a crib will shut out both rats and mice, and let in more air than any other. Its extra cost will be repaid in a few years in clean, sound, well-dried and un nibbled corn.

### DISCRIMINATION IN IOWA.

Hon. James G. Berryhill, a prominent member of the Iowa state legislature, in response to a request for a statement of his views on the question of transportation, has written a letter to the *Iowa State Register* in relation to the subject. After speaking of the depressing effects which the Inter-State Commerce Law has so far exercised on the business interests of Iowa, he refers particularly to the discrimination shown in the shipment of grain, from points in Iowa to Chicago, and the rates on the same between Chicago and Minneapolis. He says that, added to the great advantage of milling in transit rates, the railroads centering in Minneapolis concede to her grain merchants a differential rate in wheat; that is, her rate is 2½ cents per 100 pounds less than for shipments for like distances to other wheat markets in the same territory. So great is the value of this discrimination, that a short time ago when some of the roads proposed to take away this special rate, Mr. Washburn, President of the Minneapolis & Pacific Railway, and one of the largest millers in the city, protested against it and declared it would ruin the milling trade of Minneapolis, which would be diverted to Duluth, Buffalo and other milling cities. The difference in rates of all kinds of merchandise is also largely in favor of Minneapolis and St. Paul, at a greater distance, and against Des Moines and other points in Iowa at less distance from Chicago. Mr. Berryhill urges the enactment of a law giving the Iowa Railroad Commissioners the same power conferred upon similar boards of other states, whereby they can fix maximum rates for the transportation of property within the state, can equalize the rates with rates given to outside business centers, and may cite the managers of railroads to appear before them and answer to charges of discrimination preferred by shippers and others.





## INCIDENTALS.

A carload of oats was received at New York recently, which contained the astonishingly large load of 1,828 bushels or 29¼ tons.

A farmer who saw his family arrayed in new hats, exclaimed: "There go my wife and daughters with thirty bushels of rye apiece on their heads."

There is a great deal of wheat in this country. Also sometimes there is a great wheat deal. The deal goes up the flume, but the wheat remains.—*N. Y. Tribune.*

Small grub worms have made their appearance in some of the wheat fields near Delavan, Ill., and in some cases the farmers have been obliged to re-sow their fields.

An exchange says that a general burning of wheat stubble in the chinch bug districts will destroy millions of germs that will be voracious bugs next summer.

The cotton-seed oil of this country is chiefly used in adulterations, and as the product amounts to about \$8,000,000, it will be seen that the adulterant is somewhat in demand.

Thomas Bowen of White county, Ga., cultivates flowers and gourds. He recently raised a gourd that measured four feet in circumference and held a bushel of shelled corn.

The good old state of Maine is not to be outdone by her young Western sisters in the way of raising grain. A farmer in Aristook county harvested 2,000 bushels of oats from 33 acres.

The warehousemen of New York have reduced the storage of wheat from now to May to ½ cent per bushel per month, which explains the shrinkage of the premium for May to the present figure.

The farmers of this country use 35,000 tons of twine annually upon the self-binding harvesters. Allowing five pounds to the mile, this would be equal to a string long enough to go more than six times around the earth.

In Jackson county, Ill., the corn crop is almost an entire failure, owing to the chinch bug and dry weather. Some of the farmers will gather their entire crop in a sack, while others say a half-bushel basket will hold all they have.

In the receipts at Buffalo, N. Y., by lake, up to the 1st of November this year there is a decrease in flour of 456,214 barrels, in grain of all kinds an increase of 8,599,298 bushels, and in all grain flour reduced to wheat an increase of 6,284,225 bushels.

The corn crop in Louisiana this season has been a very fine one, and the yield in some instances unprecedented. One farmer testifies to having 76 bushels and 9 pounds shelled to an acre of land; and another gives his product as 75½ bushels shelled to the acre.

It is supposed by many that a continued growth of corn on the same ground is exhaustive to the soil. Others say that corn does not take a great amount of fertility from the land, and that its carbon is mainly if not entirely derived from the air through its broad leaves.

The annual report of the state commissioner of agriculture of South Carolina shows the yield of corn in that state to be 17,400,000 bushels, an increase of 3,555,522 bushels; wheat 1,121,442 bushels, a decrease of 39,655 bushels; and oats 4,001,075 bushels, an increase of 13,424 bushels.

John Duggan, aged seventy years, an employe in the Chicago, Milwaukee & St. Paul Railway Company's elevator "B," at Milwaukee, Wis., accidentally stepped into a grain hopper while at work one day recently, and was so badly injured by the revolving buckets that he died an hour later. He had been employed at the elevator for twenty-five years.

During the past year there has been paid out through the First National Bank of Arcola, Ill., \$291,928.27 for broom corn raised in Douglas county alone. Last year the yield was 300 tons from 800 acres. This year 12,000 acres were planted from which it is estimated 5,000 tons will be secured. This sells for from \$65 to \$85 per ton, \$75 being the average price. When the returns are all in,

the amount received for the past year will probably reach \$500,000. It is a paying industry.

It is reported that France is now buying corn in the New York market. This is the first time in many years that France has bought corn on this side of the water. Our supply may prove inadequate to the demand after all, as the United Kingdom also wants a goodly quantity of that cereal from this country.

Omaha Man—"You make a pretty good profit out of cotton-seed oil now, don't you?" Southerner—"Some do, but I don't." "Why not?" "Badly located." "Oh! Too far from a railroad, I suppose?" "No, I am on a railroad, but there isn't a manufacturer of leaf lard or creamery butter within 500 miles."—*Omaha World.*

The following fact should send a thrill of fiendish delight to the souls of those who have had their crop destroyed year after year by the numerous enemies of the "crops": Some insects are carnivorous in their habits, and feed upon those which destroy the products of the farm. For example, the ferocious "lion" beetle preys upon the destructive cut worm.

The consumption of corn in the United States, according to the best statistical evidence, one year with another, is as follows: 180,000,000 bushels are used for human food, 640,000,000 for working animals, 20,000,000 for seed, 100,000,000 for production of spirits and glucose, 65,000,000 for export, and 900,000,000 for the food of meat-producing animals.

A new variety of barley was a few years ago introduced into Minnesota and Dakota from British America, which is said to be the most productive small grain known in any part of the world. A yield of 34 bushels from a bushel of seed is reported. The color of the grain is black. If the reports of its productiveness are true it will be likely to supersede corn as a food for hogs, and oats as a food for horses.

The Milwaukee & St. Paul has issued a supplementary notice to the effect that the 15 cents per 100 pounds rate on wheat from Omaha to Chicago will also apply to all other grains. This slash is made at the Burlington because of the low rates on the Burlington and Northern from St. Paul; but all the Western lines are preparing to meet the cut from Omaha.

The scarcity of coal in the western part of Nebraska is creating considerable uneasiness among consumers. They are dependent upon Wyoming and Colorado for their supply, and the Union Pacific Co., which furnishes it, has been unable, on account of increased business, to haul it. Farmers are beginning to think they will have to use corn for fuel this winter.

The Missouri State Board of Agriculture offered a prize of \$275 for the best five acres of corn raised the present season in that state, but has received but few reports from contestants, although a number entered into competition. The season has not been more favorable for corn in Missouri than in other Western states, which no doubt is the reason for lack of responses.

A traveler in Germany says that a peculiarity of agriculture in that country is, that in most of the farm work, cows take the place of oxen, and women the place of men. Cows do nearly all the drawing, even to the plowing, while women hold the plow, plant and hoe, mow, pitch harvest and even carry manure to the field in baskets strapped on their backs. They also do much of the thrashing with the primitive hand flail. The term "weaker sex" certainly cannot be applied to the strapping women of Germany.

The Green Bay (Wis.) *Advocate* says that Milwaukee is reaching the goal of one of its ambitions. The wheat receipts were larger in one week recently than those of Chicago. One solution of the matter offered is that low-grade wheat is worth more in Milwaukee than in Chicago, hence a large quantity of that wheat goes to the Milwaukee market. The millers there take almost all the wheat as soon as it is brought in, thus leaving plenty of storage room, and under the storage rules there any wheat that has not been condemned can go into store.

The Ontario crop report for November states that the yield of fall wheat is 14,440,611 bushels, being 3,630,531 bushels less than last year and 5,162,693 bushels less than the average of six years. The berry is small but hard and generally below standard weight. The average yield is sixteen bushels per acre. The spring wheat crop is generally a failure. The estimated yield is 5,633,117 bushels, against 9,518,553 bushels last year and 9,713,879 bushels the average of the last six years. The barley crop is estimated at 17,184,880 bushels being 2,377,488

bushels less than last year and 2,031,583 bushels less than the average of six years. The oat crop, owing to summer wheat and drouth, is below average in yield and light weight. The estimated aggregate yield is 49,843,101 bushels from 1,682,463 acres, against 58,665,608 bushels from 1,621,901 acres in 1886.

Farmers in Michigan are making experiments in threshing corn, and have succeeded so well that they now wonder why they never thought of it before. The corn is allowed to become thoroughly cured in the shock, then it is either tied in convenient bundles or the whole shock lifted and placed on wagon racks. The ordinary grain-threshing machines are used. Some of the beaters are taken out and a board placed in front of the sieves to throw off the broken cobs instead of elevating them to the cylinder. The shelled corn comes cleaned from the grain spouts the same as any other grain. The cost is but small, being about 2 cents per shock, which is cheaper than the husking could be done by hand.

Chicago elevators contained last Saturday evening 3,869,922 bushels of wheat, 893,130 bushels of corn, 1,356,471 bushels of oats, 20,589 bushels of rye, and 197,628 bushels of barley. Total, 6,337,740 bushels, against 15,497,205 a year ago. For the same date the secretary of the Chicago Board of Trade states the visible supply of grain in the United States and Canada as 37,254,492 bushels of wheat, 7,072,293 bushels of corn, 6,608,938 bushels of oats, 275,251 bushels of rye, and 3,215,474 bushels of barley. These figures are larger than the corresponding ones a week ago by 2,109,734 in wheat and smaller by 322,746 in corn. The visible supply of wheat for the corresponding week a year ago increased 546,498 bushels.

A good deal of interest is manifesting itself in railroad circles and among the grain shippers as to what will be the outcome of the movement to make export rates the same via all seaboard points. In the matter of time Boston will have the advantage. In the number of steamers to load New York will have the advantage, but every pound of grain and flour exported will be charged lighterage or truckage. Philadelphia and Baltimore have the advantage in the fact that their facilities for loading from the car to the steamer are the best, there being only a transfer of the property from the car to the steamer, which stand side by side. It is quite evident that a good deal will depend on the popularity of the agent who represents either of the respective lines at the prominent Western shipping points.

## DEATH OF CARLOS EWELL, ESQ.

We are called upon to chronicle the demise of Mr. Carlos Ewell, of the firm of Howes & Ewell of Silver Creek, N. Y., which sad event took place at his residence at 12:20 o'clock on Oct. 27. Mr. Ewell, at the time of his decease, was, we believe, fifty-four years of age. His connection with the mill-furnishing trade dates from the spring of 1866, when he purchased an interest in the then firm of Howes, Babcock & Co., his connection following through the subsequent changes of Howes, Babcock & Ewell and Howes & Ewell. He had for a number of years been in very poor health, and, in fact, for the period between 1877 and 1883, by reason of complete nervous prostration, had been totally incapacitated from active participation in the prosecution of the business. From this, however, he rallied, and again taking up his branch of duties, the purchase of materials and general supervision of the extensive works, prosecuted it with a vigor characteristic of the man when in the enjoyment of full health. Stricken, however, with that dread malady, Bright's disease, his ability to care for his departments gradually waned, and reluctantly, the man who fought a gallant battle against the grim destroyer, gave up duty after duty. Mr. Ewell was a man born to command and direct. His order once given was not to be retracted, and while commanding the fullest obedience from those in his service, he, at the same time, had the faculty of engaging their respect. A man of untiring industry, he seemingly cared little for social demands, spending his leisure time in the domestic circle. Successful in business, his gains were largely expended in surrounding his family with such comforts and luxuries as would conduce to their happiness and pleasure. Mr. Ewell was born at Millbury, Wyoming Co., N. Y., and up to the time of his association with Howes, Babcock & Co., had been a successful and highly regarded farmer. He leaves a wife and three children who, in their deep affliction, have the sympathy of a wide circle of friends.



## ELEVATOR AND GRAIN NEWS

The grain blockade at Volga, Dak., has been raised. G. Kniper & Son will erect a brewery at Louisville, Ky. Isaac Staub is erecting a corn mill near Poolesville, Md. E. W. Spiers will erect a hominy mill at Orlando, Fla. Henry Speth has sold his feed mill at South Bend, Ind. A new elevator is in course of erection at Pierce, Neb. Bestow & Co., grain dealers, Carson, Iowa, have sold out.

S. M. Jermison will build a broom factory at Talladega, Ala.

E. S. Ball & Co., grain dealers, Westerly, R. I., have sold out.

Hipley & Hopf, Allegheny, Pa., will erect a \$50,000 brewery.

T. A. Roach has established a broom factory at Fayetteville, Ark.

The Florence Mill Co. will erect an elevator at Bathgate, Dak.

A flourishing broom factory is in operation at Rapid City, Dak.

Herald & Casey, brewers, Gilroy, Cal., have dissolved partnership.

Wm. Breuer, brewer, Boscobel, Wis., has sold out to Geo. Rainer.

Chas. E. Noyes has established a distillery at S'loam Springs, Ark.

Jesse H. Bradley will erect a corn mill at Jackson Station, S. C.

The Knights of Labor will erect a corn mill at Eureka Springs, Ark.

W. T. Botsford will build a grain elevator at Port Huron, Mich.

Fred Hobbs, grain broker, Sacramento, Cal., has gone into insolvency.

J. E. Whitaker & Co., grain dealers, Boston, Mass., have suspended.

The broom factory at Watertown, Dak., is doing a thriving business.

A large starch factory will be built at Grand Island, Neb., this season.

Pepin & Arns, brewers, Santa Cruz, Cal., have dissolved partnership.

The grain firm of Robinson & Cameron at Austin, Tex., has been dissolved.

Dodd & Marshall of Wood River, Neb., have sold out their grain business.

C. W. Horth, brewer, Nanaimo, British Columbia, has made an assignment.

W. J. Lemp will build a \$15,000 addition to his brewery at St. Louis, Mo.

E. A. Armin contemplates erecting a cotton seed oil mill at Flatonia, Tex.

Fred E. Champion of Chattanooga, Tenn., will establish a broom corn factory.

Robinson & Cameron, grain dealers, Austin, Tex., have dissolved partnership.

E. F. Roberts is successor to Wernli & Roberts, grain dealers, Rapid City, Dak.

George B. Anderson will rebuild his corn mill recently burned at Laurens, S. C.

The Texas Standard Oil Co. have about completed their works at Galveston, Tex.

George Wiedeman will erect a brewery at Newport, Ky., at a cost of \$40,000.

Sibley, Ill., boasts of three enterprising grain firms, and all doing a good business.

Walter Bros. are successors to E. F. Smith in the grain business at Holstein, Iowa.

Nichaus & Klinkhamer, brewers, Cincinnati, Ohio, have dissolved partnership.

Dinwoodie Bros., grain dealers, Campbellford, Ont., have dissolved partnership.

Philip Bauer will rebuild his brewery recently destroyed by fire, at Jamestown, Dak.

The daily grain receipts at Green Bay, Wis., range from 1,400 to 2,000 bushels.

The Upham Mfg. Co. are erecting a grain elevator, 40x40 feet at Marshfield, Wis.

A. F. Jenkins is successor to Jenkins & Larrick in the grain business at Russell, Iowa.

H. D. Warner & Co., grain commissioners, Chicago, Ill., have dissolved partnership.

C. W. Brega & Co., grain dealers, Chicago, Ill., are succeeded by E. W. Syer & Co.

C. R. Hickok & Co., grain commissioners, New York City, have dissolved partnership.

It is stated that the wheat acreage in Southern Illinois this year will be considerably below that of last year.

The farmers, it seems, have determined to have a change and will plant other crops.

Webster Cate, of Henderson, Ky., will purchase machinery for grinding ear corn.

About 120,000 bushels of wheat were in store at Davenport, Iowa, on the 27th ult.

The Phillip Best Brewing Co. of Milwaukee, Wis., will build an elevator, to cost \$10,000.

The L. Hoster Brewing Co. of Columbus, Ohio, will build an addition to their brewery.

The Kentucky Malting Co. of Louisville, Ky., will build an addition to their brewery.

The Phoenix Brewing Co., Louisville, Ky., will make extensive improvements to its plant.

Chas. Weland of Cincinnati, Ohio, contemplates erecting a large brewery at Maysville, Ky.

The Wisconsin Central Railroad Company will put up an immense grain elevator at Chicago.

It is reported that the Southern Cotton Oil Co. of Philadelphia, Pa., will enlarge their oil mill.

The Barker Mfg. Co. of Knoxville, Tenn., are increasing the capacity of their broom factory.

The New Orleans & Northeastern Railroad Co. will build a grain elevator at New Orleans, La.

The Southern Cotton Oil Co. of Montgomery, Ala., have doubled the capacity of their oil mill.

W. A. Shaw & Co., grain and provision commissioners at Chicago, Ill., have dissolved partnership.

Independence, Kan., is working for a starch factory which will use 1,000 bushels of corn a day.

The Warren Cotton Seed Oil Mill at Vicksburg, Miss., has recently been overhauled and improved.

Mr. Chas. Pancake, formerly of Bloomington, Ill., has gone into the grain trade at Sibley, this state.

P. M. Greiseman & Co., Goshen, Iowa, have sold out their grain and seed business to J. W. Sawyer.

Dubuque, Iowa, claims that the big Union Elevator being built there is the largest one in the West.

The Meriden Brewing Co. of Meriden, Conn., will make extensive improvements to their brewery.

The Joseph Schlitz Brewing Co., Milwaukee, Wis., will make extensive improvements to their brewery.

The Atlanta Starch Co. has been organized at Atlanta, Ga., with J. J. Kress as president and manager.

The Southern Cotton Oil Co. of Columbia, S. C., have erected electric light machinery in their oil mill.

O. P. Wilson of Sanders, S. C., is rebuilding his corn mill, which was destroyed by fire some weeks ago.

G. W. Swords, whose distillery at Logansville, Ga., was recently destroyed by fire, will rebuild at once.

A cotton seed oil mill at Little Rock, Ark., which cost some \$200,000, is crushing 200 tons of seeds daily.

N. M. Johnson is erecting a corn and feed mill with a capacity of 500 bushels per day at Huntsville, Ala.

H. G. Trotter of Franklin, N. C., has recently completed the erection of a steam corn mill at that place.

The Saladin Pneumatic Malting Co. has been incorporated at Chicago, Ill., with a capital stock of \$5,000.

Elevator No. 3 of the Duluth (Minn.) Elevator Company has been made regular by the Board of Trade.

The recently burned buildings of M. K. Dickinson's grain dealing firm at Manotick, Ont., are being rebuilt.

The Farmers' Mutual Elevator Company has completed a 40,000-bushel elevator at Winnipeg Junction, Man.

Bright & Cool, grain dealers, Cumberland, Iowa, have dissolved partnership. Wm. Cool will continue the business.

The Farmers' Alliance of Gainesville, Tex., will erect an elevator at some point in Cook county, not yet decided upon.

The Crystal Mill Company, Council Bluffs, Iowa, are building a warehouse with a capacity for 8,000 bushels of wheat.

The elevator at the Wharton Flour Mills at Birmingham, Ala., is completed. It has a capacity of 25,000 bushels.

The Augusta, Ga., Cotton Seed Oil Mill has started up for the winter season under the management of W. H. Wallace.

A cotton seed oil mill is being erected at Clifton (P. O. Decatur), Ga. George W. Benson of Marietta, that state, is interested.

It is estimated that fully 500,000 bushels of wheat are stored in the warehouses at Portland, Ore., awaiting higher prices.

A syndicate of capitalists from Cincinnati, Ohio, contemplate erecting a brewery at Chattanooga, Tenn., to cost \$100,000.

Alexander Mitchell of Montreal, has been stationed at Winnipeg, Man., to buy grain for the new C. P. R. R. mill at Keewatin.

On Oct. 31 the elevators of Indianapolis contained 533,510 bushels of grain, against 540,000 bushels at the corresponding date in 1886.

Mr. Frank L. Churchill of Chenoa, Ill., is erecting a grain elevator at Oak Grove, Ill. He will also put up an elevator and corn cribs at Carlock, Ill., and engage in the

grain business at that point. Mr. Churchill was for a number of years grain buyer for S. C. Bartlett & Co. of Peoria.

The Collin County Milling Association of McKinney, Tex., will build a 75-barrel corn mill. They have not yet purchased their machinery.

E. C. Creamer, a farmer near Tolono, Ill., delivered in one day at the elevator there fifty loads of shelled corn, amounting to 2,585 bushels.

The Pelican Brewing Co. of New Orleans, La., has been incorporated by Albert Erath and others. They will erect a brewery at once.

The elevator and warehouses at Clark, Dak., have been so overcrowded lately that farmers have been compelled to haul their grain back home.

The Farmers' Elevator Company at Egan, Dak., say that they are unable to get cars and will be compelled to stop buying wheat for the present.

C. H. Sowle & Co. of Mt. Hope, Kan., write us that they have just completed a new grain elevator with a capacity for 10,000 bushels of grain.

The Kansas Farmer says that cleaning wheat in the country warehouse will some day amicably settle all disputes concerning dirt and dockage.

The Northern Pacific Elevator Company has built thirteen new elevators in Dakota this year, having an average capacity of 40,000 bushels.

A dispatch from Milbank, Dak., says that \$1,000 worth of wheat per day has been sent out from that town since the beginning of the shipping season.

Starks Edison has withdrawn from the grain commission firm of Franklin Edison & Co., New York City, and Franklin Edison, Jr., has been admitted.

The Minneapolis & Pacific Railway Company will build an elevator at Minneapolis, Minn., at a cost of \$118,000. F. D. Underwood is the general manager.

Valley City, Minn., had a wheat blockade one week lately; 200,000 bushels of grain were stored in the elevators, and twenty cars were shipped daily.

The North Dakota Elevator Company's elevator which was burned at Wheatland, Dak., recently, will be at once rebuilt on a larger scale than before.

Sailing & Weston, grain dealers, Weston, Ore., purchased 60,000 bushels of wheat in one week recently, paying therefor at the rate of 48 cents per bushel.

The Covington Distilling Company has been chartered at Covington, Ky., with a capital stock of \$25,000. Godfrey Kolteroff and others are the incorporators.

Frank Fehr has bought the Ott brewery at Louisville, Ky., and will expend about \$15,000 in erecting new buildings and making improvements to the old one.

C. Hening of Mendota, Ill., will erect a malt house 76x36 feet and four stories in height to cost \$15,000. W. H. Grieser, architect, Chicago, Ill., has the contract.

The Newton Elevator Co. of Newton, Iowa, has been incorporated, with a capital stock of \$10,000. The incorporators are Wm. Vaughn, D. J. Eberhart and others.

Chas. A. Conklin, agent for the Porter Milling Company at Clark, Dak., has purchased the grain elevator at that place owned by Stokes Bros. of Watertown, Dak.

A brewery with a capacity for 25,000 barrels will be built at Strathroy, Can., at a cost of \$30,000, for Bixiel & Son. W. H. Grieser of Chicago, Ill., is the architect.

The Keeley Brewing Company of Chicago, Ill., will erect a four story and basement refrigerator, 35x95 feet, in this city at a cost of \$25,000. F. Wolf is the architect.

The Alliance Warehouse Association at Howe, Tex., is doing an extensive business in buying, selling and shipping grain. The enterprise is pronounced a decided success.

The Robson-Stegeman Distillery Co. has been chartered at Newport, Ky., with a capital of \$75,000. The parties interested are G. V. Robson, Jr., J. H. Stegeman and others.

The Journal of Duluth, Minn., says that the shipments of wheat from that port from the beginning of the week of Nov. 6 to the end of the season will be fully 1,000,000 bushels.

Of the wheat now included in Duluth stocks, nearly 1,000,000 bushels, which are in the Duluth Elevator Company's warehouse at West Superior, Wis., are said to be practically off the market, being held for carrying charges.—Daily Business.

A man named McDade brought suit against Mr. Henderson of Danville, Ill., asking \$10,000 damages for injuries received at the elevator by falling through a trap door, breaking his leg above the knee. Verdict was renuered for the sum sued for.

The Indianapolis, Ind., Journal says that the grain merchants of that city are shipping more corn to points where in former years they have bought their corn, than they are shipping to interior New York and New England points. It is stated that forty counties in this state will be obliged to buy corn this year, all of which are among the best corn-growing counties in the state when there is no drought to damage crops.

Battle Lake, Minn., has been enjoying a wheat fight. A. C. Hatch, a private buyer, has been paying 2 cents more than the Northern Pacific Elevator Company. Recently the railroad agent notified Mr. Hatch that he could have no more cars unless he put the price down to



what the elevator company was paying. Mr. Hatch has engaged a lawyer, and is determined to fight the affair to the end.

A. P. Cory, grain dealer, Danvers, Ill., is making arrangements to build an elevator at Shrock's Station, this state. Frank Tobias will buy grain for him there the coming winter.

The hominy mills at Indianapolis, Ind., are troubled to get the grade of corn they need for the articles they manufacture. The coming in of the new crop will obviate their difficulties.

The Bartholomei Brewing Company of Chicago, will build a storage house 50x100 feet and four stories in height at a cost of \$15,000. W. H. Grieser, architect, is preparing the plans.

The Alabama Brewing Association has been incorporated at Montgomery, Ala., by Jacob Greel, David Kraus and others. They will erect a brewery at a cost of from \$60,000 to \$100,000.

Architect W. H. Grieser of Chicago, Ill., has the plans prepared for a five-story stock house 90x96 feet for the Godfrey Brewing Company of this city. The building will cost some \$30,000.

For the purpose of encouraging the building of grain elevators along the Grand Rapids & Indiana Road, the company is offering free sites for elevators at convenient points along its main line.

N. S. Derby & Son of Dubuque, Iowa, have taken the Milwaukee Elevator at Olin, that state, and will operate it the coming year. They will still continue in the grain business at Dubuque.

Milton Shive has withdrawn from the firm of A. B. Hackman & Co., mill feed and grain commissioners, Philadelphia, Pa. Andrew B. Hackman continues the business under the old style.

The farmers and merchants of Belleville, Ont., are kicking lustily because there is practically but one buyer of barley in that city. He sets his own price, and trade is consequently diverted elsewhere.

The Indiana Starch Works, located at Franklin, Ind., were sold Oct. 29 to Peter Heck, one of a syndicate which held a mortgage on the works for \$21,000. The works will be put into operation at once.

A local paper says that 6,000 tons of wheat are stored on the docks at Milton, Ore., and the daily receipts aggregate about twenty tons. They, too, are suffering for want of cars with which to ship their crops.

A special dispatch from Montreal dated Oct. 2 says that the large elevator in the C. P. R. yards is completely filled and the smaller one is being rapidly filled. Great quantities of grain are being shipped to that point.

The Canadian Pacific R. R. Co. has decided to enter actively into the business of buying grain in the province of Manitoba. The grain dealers regard this as unfair competition, and much hostile comment is expressed.

The glucose works at Davenport, Iowa, are busy filling orders that come in from all parts of the United States and Europe. The capacity is 3,500 bushels of corn per day. Most of the corn coming in now is from Western Iowa.

Frank Coover and S. E. Anderson took a wager on wheat shoveling at the "Crown Roller Mill," Minneapolis, Minn., recently. The former shoveled 30,000 pounds in 24 minutes, leaving his competitor 800 pounds in the lurch.

The grain houses along the line of the Winona & St. Peter Railway, between Winona and Huron, Minn., are still extremely crowded. All the empty cars are being sent to that region, and special trains are being run to as great an extent as possible.

The Farmers' Mutual Elevator Company has completed an elevator with a capacity for 40,000 bushels of grain at Winnipeg Junction, Man. The first load of wheat ever marketed at that place was marketed at the new elevator on the 15th ult.

Omaha, Neb., has decided that she must have another grain elevator, and a big one of about 1,000,000 bushels capacity. The project is much favored by the Board of Trade of that city, and many solid business men have expressed a willingness to take stock in the enterprise.

The farmers in the vicinity of Mankato, Minn., are energetically pushing their scheme for the organization of a Farmers' Warehouse Association. Several buildings have been offered them by railroad companies, in which to carry on their business. They will incorporate under the laws of the state.

The Berger Commission Company, lately organized at Aberdeen, Dak., propose to lease and build elevators at various points in Central Dakota and do a general commission business in grain. The parties interested are Alex. Berger, Milwaukee, Wis.; C. Dennis and J. J. Petty of Aberdeen, Dak., and George C. Sherman, Ipswich, Dak.

A local paper says: The little city of Loraine, Ill., on the Carthage branch of the C., B. & Q. is fast coming to the front as a grain center. Since the 18th of July Mr. George Guiter has shipped 40,000 bushels of wheat alone, besides quantities of other grain, hay and stock. But few cities the size of Loraine can say as much.

The contracts for all the machinery and grain buckets to be put into P. D. Armour's enormous elevator now in course of construction on Goose Island, Ill., were let some time ago. The machinery contract was secured by the Bouton Foundry Company, and includes much heavy and substantial work. The grain buckets, some 9,000 in number, will be made by Webster & Comstock, whose contract

price was 27 cents apiece. The elevator building itself will be the largest in the world, and will have an ordinary capacity of 1,500,000 bushels of wheat, but will accommodate 2,000,000 bushels in an emergency.

Messrs. Hunter & Cole, grain buyers of Mellette, Dak., who have been paying six cents more for wheat than the regular elevator card price, have brought suit against the Chicago, Milwaukee & St. Paul Railroad for refusing to furnish cars for the shipment of their grain, while the elevators were promptly supplied.

The case of J. C. Argo against the Nashville (Tenn.) Warehouse and Elevator Company, which had been pending for some time in the Circuit Court, was decided on the 8th inst. by the jury bringing in a judgment for complainant for \$7,750. The suit was instituted by Mr. Argo to recover damages sustained by the loss of a leg while at work for the company.

The Groton, Dak., *Leader* says: "When the new railroad line gets to Groton it is expected that the Hastings & Dakota will have to make a freight reduction, and the elevators buy wheat on a smaller margin or close houses. In view of the advantages taken of the wheat raisers at different times, a little worry on the Hastings & Dakota would be enjoyed by many and would be healthy for the country."

The following story comes from Brown county, Dak., and is vouched for by many farmers, says the *Pioneer Press*: The farmers around Claremont put in a farmers' warehouse where there were two elevators. Wheat promptly went up 7 cents a bushel, and the producers got more favorable grading. This prevented the elevators getting any grain. But, it is averred, they got the railroad to help them out. One day the warehouse was full of grain, and a lot of empty cars stood on the track to be loaded the next morning. That night all the empty cars were hauled away, and the farmers' warehouse being full, and they unable to get cars, they had to quit buying. As the elevators were empty, they could and did buy—but at a reduction of from 5 to 7 cents on what the warehousemen had paid. Meanwhile no empty cars were left at Claremont. But when the elevators were filled the railroad sidetracked a lot of empty cars for their benefit, but not one for the farmers' house. Somehow the latter became aware that the cars were to be left, so they again bought grain and piled it up along the track. They then took the empty cars, filled them with their own grain and stayed by the agent till he billed it and sent it forward on the first train.

Among the most prominent of the established industries of Galveston, Texas, is the Galveston Cotton-Seed Oil Mill, which was established in 1880 with a capital stock of \$300,000. It occupies a block of ground, and the buildings are all substantial brick ones. The mill crushes 120 tons of seed per day, converting it into 4560 gallons, or ninety barrels of oil. It also produces forty tons of cake during the same period, and gives employment in its operation to 100 men. The product of this enterprise finds a market in Mexico and California, where it is made into olive oil, and in the West where it is used in the manufacture of butter and lard. Formerly, all the cake had to be sent to Europe for market, but now the East is making a market for this article, and about half the cake manufactured by the Galveston mill goes to the East, the other half to foreign markets. Nothing of the raw material is lost in the manufacture of cotton-seed oil and cake. The hulls from the seed supply all the necessary fuel; the ashes go to Florida to fertilize the orange groves, and the sugar planters of Louisiana use the meal for fertilizing purposes. The hulls that take the place of fuel also find a ready market as a fattening substance for stock, and are easily sold at from \$3 to \$4 per ton. The Galveston mill produces a sufficient surplus of these hulls to supply fuel for the electric light works, flour mills and other industries, finding it cheaper than coal and giving better steam-producing results.

### SHE WAS MARRIED FOR KEEPS.

The skipper of a canal boat on the Illinois and Michigan Canal recently decided, after mature deliberation and careful consideration, to marry his cook, a right smart, energetic and not wholly bad looking Celt, who had been a tried and faithful servant for him for quite a number of his perilous trips on the storm-lashed canal. So he spoke to her about the matter one day, and after securing her coy consent he ordered the boat tied up at the wharf of Joliet, and being a practical skipper, skipped up the street after a parson. The nuptial knot was soon tied, the parson beaten down to \$1.50 for his fee, and then the canal boatman said:

"Well, Melindy, we are married fur keeps now. We are hitched fur life and must pull together. I'm a little short handed to-day, and as that lead mule has got saddle galls on his back you jist take the tow-path and lead him down to Lockport, and I'll steer and kinder ruminate on some plan to give you work on the boat without going ashore in mud. I've got a powerful sight more respect for you now that you're my wife, Melindy."—*Chicago National*.

Of 249,000 bushels of foreign wheat received in three days at the port of Liverpool, 168,000 bushels were from America.

A royal committee has been appointed to investigate the Hessian fly ravages in the United Kingdom, twenty counties in England, and ten in Scotland having been visited by this insect. The damage is placed at from two to three bushels per acre.



### Limiting Liability by Contract.

The right of a carrier to limit its common law liability by contract, if made fairly and advisedly on behalf of the shipper, cannot be denied; but the mere fact that the bill of lading given contains a clause exempting the carrier from loss of the goods by fire, cannot be held conclusive of such a contract.—*Merchants' Dispatch Trans. Co. vs. Leyson, Vol 89, Illinois Reports.*

### Liability as Carrier or Warehouseman

Where goods are delivered to a common carrier for transportation, and are placed in the depot or warehouse awaiting transportation, with nothing further to be done by the shipper, and they are burned before being shipped, the company so receiving them will be liable as a common carrier, and not merely as a warehouseman.—*Grand Toner Manjr. and Trans. Co. vs. Ullman, Vol. 89, Illinois Reports.*

### Warehouse Receipts—Lien for Purchase Money.

In order to entitle a warehouseman to assert a lien for purchase money as against a bona fide holder of a warehouse receipt it is not necessary that the amount of purchase money unpaid should be set forth in the receipt. It is sufficient if it appears from the receipt that the purchase money is unpaid, without stating the amount. So held by the Kentucky Court of Appeals in *The Western Bank vs. Marion County Distilling Company.*

### Bill of Lading—Draft—Carriers' Liability.

Where a shipper attaches his bill of lading to a draft upon the consignee, he thereby expresses his intention to deliver the goods upon payment of such draft, and to retain control of them until such payment, and the carrier who, under such circumstances, delivers them while in transit to the shipper, is liable to the consignee who has duly taken up the draft. So held by the Circuit Court for the Northern District of California in the case of *Wells, Fargo & Co. vs. Oregon Railway & Navigation Company.*

### Elevator.

The state of New Jersey conveyed certain lands to railroad and canal companies by an act passed March 30, 1868, in order to enable them to increase their depot and terminal facilities at Jersey City. The act in question empowered the grantees to fill up and improve the property granted and to erect there wharves, piers, canals, depots, storehouses, and other buildings, authorizing them to charge such wharfage and other rates as their directors might deem reasonable or as might be agreed upon. The act also repealed all acts subjecting such lands to any other tax than was imposed upon said companies by their respective charters or acts of incorporation. It was provided, however, that such portions of the property and of the improvements thereon as should be used for other than railroad, canal depot, transshipping or landing purposes should be subject to local and municipal taxation. Upon a part of the lands an elevator was used for the transshipment and storage of grain, and a storage charge was made upon grain which remained in the elevator more than ten days. The authorities of Jersey City undertook to tax the elevator on the ground that it was not used for elevator purposes. The Supreme Court of New Jersey held in the case of *state ex. rel. Pennsylvania Company vs. Jersey City*, that the elevator was not subject to taxation, that the charge for storage was made as a sort of penalty to induce the shipper to move it, and that it did not withdraw the elevators from the class of property necessary to railroad purposes.

### THE VALIANT REAPER.

I sing me not a dainty lay  
Of one who reaped the grain.  
Of one who modest went his way,  
Next season came again.  
But rather do I sing of one  
Whose reaping days were o'er,  
Who whittled there beneath the sun,  
Beside the tavern door.  
"By gum!" said he, "I saw the time  
I useter foller two;  
In course, 'twas when I was in prime,  
An' 'fore I met with you.  
I war accounted 'shucks,' you bet,  
In bundlin' up the rye;  
'Twill be a long spell 'fore they get  
A blinder sitch as I."

Thus sang the valiant reaper wight  
Who whittled by the door,  
Astonishing the hearers, quite,  
By what he'd done before.  
The evidence of his success,  
Between both you and I,  
He hasn't lost his grip, I guess,  
For reaping of the rye.

—*Goodall's Sun.*



# THE AMERICAN ELEVATOR AND GRAIN TRADE.

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HARLEY B. MITCHELL, - - - Editor.

## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1887.

## EXPORTS OF BREADSTUFFS.

The report of the Bureau of Statistics at Washington, issued Nov. 9, for the month of October, 1887, shows a decrease in corn, oats, barley and wheat, as compared with the same month for the previous year. The total value of the breadstuffs exported during October, 1887, was \$8,593,012, against \$11,646,804 for October, 1886. The value of the exports for the ten months ending Oct. 31, 1887, was \$138,485,636, against \$122,478,833 for the ten months ending Oct. 31, 1886.

The exports of corn for the month ended Oct. 31, 1887, were 2,489,695 bushels, against 3,292,562 bushels for the same time last year. There were 28,531 bushels of oats exported during October, 1887, against 44,347 bushels in October, 1886. The amount of wheat exported during the months named was 3,402,649 bushels for October, 1887, against 6,941,370 bushels for 1886. Rye stands at 529 bushels for October, 1887, against 3 bushels for October, 1886.

## WHEAT WANTS AND SURPLUS.

BRADSTREET'S estimate, based on the latest returns, of the probable available surplus wheat, and the requirements of leading countries, is as follows: It is probable from the unofficial reports of Russia's wheat crop, that she will have an export surplus of 64,000,000 to 70,000,000 bushels. Austria-Hungary may have an export surplus of 16,000,000 to 20,000,000 bushels, and Roumania and the Turkish Principalities 10,000,000 to 12,000,000 bushels. British India will not probably have to exceed 3,000,000 bushels from October, 1887, to March 31, 1888. The prospects for the Australasian wheat crop to be harvested in January, 1888, are exceedingly favorable. If the crop of 1888 meets expectations, there may be an export surplus in Australia of 10,000,000 bushels, including the reserve of old wheat. The Egyptian wheat crop does not count for much, and is not considered. Chili and the Argentine Republic may possibly contribute toward Europe's supply, 6,000,000 to 8,000,000 bushels, but the smaller quantity is more probable. The Dominion of Canada, with a deficient wheat crop in Ontario and Quebec, will probably require all, or nearly all, the surplus of Manitoba. The probable wants of the wheat-importing countries of Europe are: In the United Kingdom, 130,000,000 to 142,000,000 bushels; Holland and Belgium, about 20,000,000 bushels net; the German Empire, 8,000,000

to 10,000,000 net; Switzerland, 10,000,000 bushels; France, 20,000,000 bushels, more or less; Greece, 5,000,000 bushels; Spain and Portugal, 10,000,000 to 12,000,000 bushels, and Italy 15,000,000 to 20,000,000, perhaps more. The reserves of Europe in 1887 are smaller than in any of the last five years, especially so in all continental countries.

## REDUCING ELEVATOR CHARGES.

WHILE the elevator men in New York and Buffalo have been compelled by public pressure to reduce their charges for grain storage, for the next six months at least, to 1-2 cent per bushel per month, the Chicago warehousemen do not seem to profit by the lesson taught, and not only refuse to lower their rates, but have locked up the receipts for the grain in store and are keeping it out of the market. Although there are about 5,000,000 bushels of wheat stored in the city, shippers complain that they cannot get hold of enough to fill their orders. A local paper, referring to the course pursued, says: "This is infinitely worse than a speculative corner in bread-stuffs. A corner is run for the purpose of mulcting the gamblers in produce; the producers are benefited, and consumers rarely pay an increased price for food. Why should not the men who lock up millions of bushels of wheat and hold it off the market be held accountable the same as the gambler who forestalls the food markets for speculative purposes?" The legislature will be asked this winter to interfere and make the "ring" amenable to law if not to reason.

## BUCKET SHOPS AND BOARD OF TRADE.

The New York *Sun* asserts that the New York Produce Exchange was hit a harder blow than most people suspected when President Wright of the Chicago Board of Trade called it a bucket shop. The story is that at the time that term was applied, many of the members of the New York Exchange had formed a limited company of \$250,000 capital for the purpose of fostering speculation in grain, stocks and cotton. The Chicago broadside was a crusher to the scheme, and the subscribers to three-fifths of the capital at once backed out. In referring to this story the Pittsburgh *Dispatch* remarks: "Yet so far as President Wright is concerned, it was plainly a case of pot and kettle. Everybody knows that the speculation on the Chicago Board of Trade is to the speculation on the New York Produce Exchange as Ossa to a mole-hill. Indeed, the enmity of the Chicago body to the bucket shops exists because it wants all the profits in the gambling transactions to itself; and while it can view with equanimity the growth of bodies that may divide with it the actual and legitimate business of handling grain, its ire rises beyond control when any one touches upon its darling prerogative of keeping up the greatest gambling room in agricultural products in the known world. When the big exchange men get mad at each other in this way the public can hope for the disclosure of some very interesting and important truths."

## THE BUCKET-SHOP DECISION.

The recent decision of Judge Collins, in which he declined to dissolve the injunction forbidding a telegraph company to refuse to deliver Chicago Board of Trade quotations to bucket shops, has caused widespread comments among the various newspapers of the country, which almost without an exception sustain the course pursued. In his argument Judge Collins said:

"The pulse of trade must be allowed to beat full and free, and it cannot be permitted that an aggregation of private enterprise and capital should stop the flow of the rich, warm current that brings health and prosperity to the body of the people.

"It has been urged that the market reports can be obtained from the daily newspapers, and that should be sufficient for the public. The institution which, by its own action, has so far advanced the customs and usages of merchants that instantaneous quotations have become to them necessary, should not be permitted under this plea to justify discrimination or so airily stop progress. That these quotations are of no use except for gambling purposes is answered by the existence of 1,500 approved

correspondents who are not gamblers and to whom daily they are transmitted.

"Further, it is urged that bucket shops cannot be suppressed unless the Board has the power of discrimination. They should be suppressed, and the court would go far to accomplish so desirable an end, but regarding this claim of the right to discriminate, as more dangerous to the public in its consequences than the bucket shops, we must look to the criminal code as the safer course of the two."

Referring to this the Philadelphia *Record* remarks: "The sense of equity possessed by this learned jurist is worthy of remark in these days of flexible judges and cut-and-dried decisions." It is said however that the decision must not be regarded as a victory for the bucket shops, as the judge merely held that the evidence before him was insufficient to sustain the charge that Murphy & Co., who brought the injunction, were running a bucket shop, and the injunction only remains in force until the truth of that allegation can be tested on final hearing. President Wright of the Board of Trade, when asked his opinion of Judge Collins' decision, replied, "He might as well decide that my private books are public property."

As a reason for the lighter receipts of wheat at Duluth this year than last, the *Daily Trade* gives the fact that the crop this year in the country tributary to Minneapolis was deficient, and the millers in the latter city, in order to keep their mills running, were compelled to invade Duluth's territory and give better prices than Duluth could pay. And also the crops were three weeks later this year, and rainy weather put back farmers in the Red River Valley three or four weeks more. Prices are lower and do not induce so free selling; country elevators are more disposed to hold wheat for storage charges than ever before, and, principally, there is a great scarcity of cars on Duluth roads, relatively more than ever before, for with the same number of cars as last year they have a much greater territory to supply.

## THE INDIAN WHEAT QUESTION.

THE St. Paul *Pioneer Press* thinks the notion that India is about to drive the United States out of the wheat market is unsupported by facts. That the price of wheat has been lowered by the cheap work of the Hindoo peasant is true, but the fear that the wheat-raising business is to be taken out of our hands is entirely groundless. Mr. Edward Atkinson, who is engaged in researches in the matter, has given some preliminary statistics which may be of interest to farmers as showing some of the conditions of production in India, which will prevent competition there from further depressing prices. He says: "The area of possible wheat cultivation is extensive, but it is from 700 to 1,000 miles from the seaboard; it is in a hot section, where the supervision of Europeans is necessary but very costly; without such supervision the wheat cannot be prepared for export, even in the rude manner in which it is now prepared. It is cultivated by prehistoric methods, \* \* \* the crop per acre is small, and the cost of production relatively to the rate of wages is very high. \* \* \* The wheat is dirty; when it reaches the seaboard at a heavy charge by rail it has to be repacked, dusted and put in fit condition for export. When the wheat reaches Bombay it must be carried by the Suez Canal and by sea a distance of about 6,000 miles. Its quality when it reaches London is subject to much uncertainty. \* \* \* It is at least doubtful whether anything less than 34 shillings per quarter will leave any margin whatever at the point of production for the payment of the laborers under the present condition of the trade. At that price the supply seems to be diminishing." His conclusion is that when wheat sells for 34 shillings per quarter in Mark Lane—equivalent to \$1.02 per bushel—the Indian supply diminishes, and the competition of Russia is checked. If the American supply can continue when the price reaches this figure, we can hold our own against the world, and the farmer while getting but 65 cents per bushel for his wheat, is able to make a small profit on it. There seems to be no reason at least for the wheat producers of this country, to become alarmed at any foreign competition.



## Editorial Mention.

It is estimated that 170,000 strangers visited the Sioux City, Ia., corn palace.

ARRANGEMENTS have been made by Eastern capitalists to use Montreal as a shipping port for grain, via the Duluth & Sault Ste. Marie road.

THE new German duty on oats and barley is 19 1-2 cents per bushel. On other grain it is 13 cents per bushel, with 5 1-4 cents per cental on bran.

BANKER HARPER of Cincinnati, will spend his Thanksgiving in a common cell in the jail, and will have leisure to reflect on the vicissitudes of life and the uncertainty of wheat deals.

THE Indianapolis Board of Trade's membership is rapidly approaching the legal limit, 500, only three vacancies remaining; and when the limit is reached, memberships are expected to "boom."

C. C. PHILLIPS, the well-known manufacturer of vertical and horizontal portable mills advertised in this issue, has removed his office from Twenty-second street to 20 South Broad street, Philadelphia, Pa.

THE *Western Plowman* says: "The various bugs that prey upon the farmers' crops, all but one, have their seasons. Paraphrasing (and improving) the poet, 'Thou hast all seasons for thine own, O hum-bug.'"

GRAIN and provision dealers and millers will note in this issue the card of J. Hampden Slater of Petersburg, Va., general merchandise broker. Mr. Slater will be pleased to open correspondence with parties whom he can serve.

THE report that an elevator trust was to be formed at St. Louis, by several millers and grain men, embracing the elevators on both sides of the river, is denied to have any foundation, except in the wishes of one or two grain men.

ELEVATORS all over the West are making a fight to get wheat to hold until next May. Secretary Smith of Toledo, does not think this argues well for railway earnings, though it may prove a strengthening feature to the value of the grain.

MINNEAPOLIS people think the Duluth grain men are unduly exercised over the Washburn inspection matter, and assert their belief that Duluth will be benefited rather than injured, by having all lake wheat go out under Duluth grades.

THERE have been but two years since 1878 when the aggregate crop of wheat, corn and oats has been as small as the present one. In 1878 the total amount was 2,221,919,710 bushels; in 1881, 1,994,677,080 bushels; for 1887, 2,550,600,000 bushels.

THE ENTERPRISE HARDWARE Co. of Pittsburg, Pa., advertise in this issue their farm grist mills and corn shellers, of which thousands are now in use in every part of the country. They are sold very cheap, and the manufacturers will send circular on application.

A LATE dispatch from the city of Mexico, says: A corner is being run here in the wheat supply of the city. The annual consumption is 250,000 carloads, of which a syndicate of bankers secured 150,000 carloads. The principal consumer is a proprietor of a bakery which consumes 50,000 carloads yearly. He secured a year's supply outside the syndicate, and the smaller dealers think they can do likewise; so it looks as if the syndi-

cate, which has \$1,300,000 invested in the deal, will carry the load through a year. The common people eat maize bread and are not affected.

Now is the time to act in the matter of driers and grinders; and grain men and others who are interested will notice the card of Cutler & Co. of North Wilbraham, Mass., whose drier is very well known and whose Automatic Adjustment Mill has a score of good points to recommend it.

MR. GEO. SEAVERNS has withdrawn his elevator "A" from the list of "regular" warehouses at Chicago, on account, it is said, of the expense of getting grain in and out of it. This withdraws about 245,000 bushels from the stock of regular wheat in the city, leaving 3,977,000 bushels in store.

It is the Pennsylvania farmers this time who have fallen victims to the Bohemian oats swindlers. In Berks county and others in Eastern Pennsylvania, from \$50,000 to \$75,000 have been taken from the confiding countrymen by an association run by these robbers. The victims will appeal to the law to recover the money lost.

THERE has been an increased acreage sown in wheat in Dakota this year, while in Minnesota the amount is slowly but steadily decreasing. The grade in both state and territory is higher than usual. The total product for both is placed at 83,000,000 bushels, more than half of which will be shipped and the balance made into flour at Minneapolis.

RESPECTING the recent ruling of the Postoffice Department, in regard to sample and merchandise packages, the reader will find "The Special Notice to Millers and Grain Dealers," of the Howe Pattern and Mfg. Co. of Detroit, Mich., of interest in this connection. The offer made is a generous one, and will tend not a little to increase the popularity of the Howe Challenge Sample Envelope.

THE proposed amendment to the commission rule of the Chicago Board of Trade, to change the rule recently adopted, so that by special arrangements members might do business for one-eighth and one-sixteenth, while the established rate would remain one-fifth and one-tenth, was voted down. The contest was a sharp one, and the ballot showed a majority of 184 votes in a total of 948.

THE Boston *Herald*, speaking of the disastrous result of the recent wheat deal in San Francisco, and the similar one in Chicago, thinks one good effect will be the demand for better security from the speculators to those they purchase from. This will prevent such reckless purchases as were made by the California men, the canceling of which for lack of means to pay the stipulated price, proved disastrous to all parties.

GEORGE FRANCIS TRAIN, in a recent lecture at Omaha, Neb., said: "It is a disgrace to a city surrounded by a wheat and corn country, that you have not a grain elevator. No city that makes any pretense to size ought to be without a flour mill. It is a shame that Omaha has none. How is it at Minneapolis, where there are mills which turn out 10,000 barrels of flour a day, put them on boats and deliver them in Liverpool in twelve days?" They don't, George.

A REPORTER for the Buffalo *Courier* lately came across a canal boat on the Erie Canal whose driver was a student at Cornell University. He took this way of earning money during his vacation, and seemed to heartily enjoy the free open air life. He expatiated on the beautiful scenery of the Mohawk and Hudson river valleys, the healthful exercise, the time for reading, and the general economy in clothes, etc. The reporter was invited into the cabin, which was neatly and tastefully furnished, and where an excellent dinner was served by the captain's daughter. The canal men, many of them at least, are great readers, and pass the magazines and papers from

one boat to another, in this way securing a quantity of reading matter at small cost. The student said he had tried serving as a waiter at some of the summer resorts, but infinitely preferred the life on a canal boat. He will return to college with vigorous health, good digestion, clear brain and \$50 in his pocket.

A CANADIAN government paper says that Mr. Ross, M. P., for Lisgar, is urging the government to abolish the customs regulations which permit the importation of American wheat in bond into Canada. The grain he says is brought into Canada in bond to be ground, and escaping the payment of duty in many instances, is sold there to the detriment of the wheat producers of Canada, especially the Manitoba and the Northwest farmers.

THE Chicago, Milwaukee & St. Paul road will, from Nov. 24, reduce the grain rate from Omaha and Council Bluffs from 20 to 15 cents per 100 pounds. It is said that this action is taken in retaliation for the refusal of the Chicago, Burlington & Northern to advance flour and wheat rates from Minneapolis and St. Paul to Chicago. The other roads are preparing to meet the reduction, and a general lowering of rates on Western roads may be looked for.

IN the case of the boards of trade of Farmington, Northfield, Faribault and Owatonna, all Minnesota towns, against the Chicago, Milwaukee & St. Paul Railroad, for unjust discrimination in the wheat-carrying trade, the Inter-State Commission has rendered a decision adverse to the railroad. The Commission holds that it is not a sufficient compliance with the law that rates are reasonable in themselves, but they should be so relatively reasonable as to protect communities and business against unjust discrimination.

CONSIDERABLE attention has been attracted to the new invention of the pneumatic grain transfer boat, the Cyclone, which has been recently undergoing a test at Buffalo. It is a large, bell-shaped apparatus, that loads and unloads grain by air-suction, and it is claimed by the owners that a saving of 3-4 cent per bushel will be made for shippers. This is an item of no small moment to large dealers, and if the Cyclone is what her inventors claim, the present system of grain handling at the large ports will be relegated to a back seat.

THE fool-killer is badly needed in the Williamette Valley, Oregon, where a company of sharpers calling themselves the "Empire Seed Company" of Portland, Ore., have been selling seed wheat to the farmers at \$15 per bushel, promising to buy back more wheat at the same price after the next harvest. Mr. Hogan, the secretary of the company, was arrested at Albany, Ore., while trying to negotiate a note for \$600 which he had obtained from one man for forty bushels of wheat. The swindlers have secured several thousand dollars' worth of notes in this way.

IN the trial of Elliott M. Todd of New York, for keeping a gambling house under the popular appellation of a "bucket shop," the counsel for the defense charged that the New York Stock Exchange had for years done its utmost to drive the defendant from the street because he was a dangerous rival. The term "bucket shop," the lawyer said, is one of contempt and derision, but the bucket dipped in the ocean of speculation outside the New York Stock Exchange, is filled with the same quality of commodity as can be found inside the exchange precinct. The case was given to the jury after Judge Cowing had charged them that they should only consider whether the system in vogue at the office of the New York Stock Company (limited), Todd's concern, was gambling or not. After half an hour's deliberation, a verdict of guilty was rendered. Assistant District Attorney Purdy asked for immediate sentence, that the case might be brought before the Court of Appeals promptly, and decided "that



the nuisance might be quickly suppressed." A fine of \$100 was imposed and paid.

In two townships of Clinton county, Mich., where very few farmers take any papers, forty-two residents invested in Bohemian oats, some taking as high as fifty bushels. Of the forty-two only five took a newspaper of any kind. These are the kind of men who do their advertising on the fences, and complain of the burdens of taxation and the monopolies of the rich. Verily experience comes high, but they must have it.

THE weather-wise-man has been walking through the corn fields, and says we are to have a short open winter because the corn husks are thin; the naturalist says the woodchucks dug their holes early and deep, therefore the winter will be long and cold. The goose-bone man, says the breast-bone of the goose is thin and clouded, therefore the winter will be wet and unhealthy. In the meantime, the coal-man goes on his way slowly and calmly raising his price at 50 cents per raise, and the *profits*, not the *prophets*, are what he is looking out for.

A RECENT dispatch from Duluth, Minn., says: "Ever since the decision of the State Board of Warehouse Commissioners to allow inspection out of wheat in the Washburn (Wis.) elevator by a state inspector sent from Duluth, the Board of Trade here has been considering plans by which the injury done to Duluth as a grain market and the reputation of Duluth grades may be protected. The board of directors have recommended to the Board the adoption of a rule which, it is believed, will serve the purpose and will have the effect of placing control of Duluth shipments again in the hands of the Board. It provides that the secretary upon application to him and upon proper proof that the grain has been shipped from a warehouse or warehouses made regular by the Duluth Board shall stamp upon the certificate of inspection that the grain was shipped from such warehouses and sign the same as secretary, and also that the secretary shall keep a record of the date and number of certificates, the name of the persons to whom they are issued, the quantity and grade of the wheat, warehouses from which it was shipped, the name of the vessel or the car number, etc. The amendment meets with general approval and will probably be adopted by the Board without opposition."

It appears difficult for Eastern people to realize the rapid and blighting effects which such a severe drought as visited Kansas and other Western states this last summer can have upon the corn crop; and strong efforts are being made by newspapers and grain speculators to convince the people that all reports as to the shortness of the crops are gotten up for speculative reasons. The editor of the *Farmer's Review* says: "To a writer sitting in a comfortable New York newspaper office with abundant rains in the country adjacent, such loss of condition in so short a time may seem incredible, but to a dweller in the drought region, where for six weeks or two months there was not rainfall sufficient to lay the dust, who saw the pastures turn utterly brown and bare, the wells, creeks and watercourses go dry, the corn tassels dry and scorch up before the pollen was formed, and the leaves fire, who saw wide fissures open in the dry earth, and the leaves on the trees prematurely dry up and fall from the effects of drought and heat, to such the wonder is not that the condition of the corn crop fell off as much as it did, but rather that we have any crop at all. The Kansas State Board of Agriculture's report for the month ending June 30, 1887, said of the corn crop: 'Reports show its condition to be 100 to 150 per cent. as compared with the average for five years.' Its report of date of Sept. 10, just at hand, says: 'The area planted last spring was 6,520,408 acres, or 11 per cent. in excess of any former year. Of this area 2,520,332 acres, or 40 per cent., while valuable for fodder, will not be worth husking, leaving 4,000,076 acres from which a product may be expected. This acreage we es-

timate will yield 82,557,258 bushels, or 49 per cent. of the average annual product for four years.' This is equivalent to only 33 per cent. of an average yield for the entire acreage planted."

### HOPPER SCALES.

The law providing for the weighing of transferred grain by hopper scales went into effect at Chicago, July 1, but, although nearly five months have elapsed, only three of the roads centering here—the Michigan Central, Baltimore & Ohio and the Grand Trunk have so far even begun to make preparations for building them. One of the principal reasons for the delay probably is the cost, which is about \$6,000.

The usual method of track-weighing is to run an open air scale, and the weight of both car and cargo is taken. The empty car is afterward weighed and its weight deducted. This plan works well in summer, but in winter it is difficult to take correct weights, and in very cold or stormy weather the car is apt to become loaded with snow and ice after it is weighed with its contents, thus adding to its separate weight. By the hopper system the grain is transferred as well as weighed. At the rate of three-fourths of a cent per bushel the transfer of a car of grain costs something like \$5, whether the grain remains in the elevator a short or long time. A well-known grain receiver, speaking on this subject, says: "The law has been passed and its provisions should be enforced. The railroads were entitled to reasonable time to prepare themselves, and they've had it. Now either the Board of Trade or the receivers and shippers will see to it that the law is enforced. As soon as navigation closes most of the grain will be sold 'f. o. b.' (free on board cars). The road that sets up hopper scales will get the business, other things being equal."

A railroad manager expressed the sentiment of the railroads as follows: "The law went into effect on short notice, and none of the roads had hopper scales. One or two roads were using 'Jumbo' scales, a sort of a miniature elevator on a car, but they are expensive, difficult to handle, and of small capacity. Since the law went into effect we've been looking around, and in the meantime continuing to use our track scales. A hopper scale costs \$5,000 or \$6,000, and can't be built in a day. The trouble is that it's a question of who's to pay for the weighing; the elevators would handle it, and we would gladly send them all cars if the owner would pay for the transfer and weighing. I suppose he feels just as we do, and doesn't want to pay the cost any more than we do. The local grain business (buying and selling) is getting less every year here, and we hate to invest money, say \$10,000 to \$20,000, in a plant that will be of less use to us year by year. Still, we'll get around to it in time and are considering plans."

### THE NEW YORK GRAIN WAREHOUSE WAR.

There was a rumor that the grain warehousemen of New York have offered to take grain at  $\frac{1}{2}$  cent per month from December 1 to May 1 next, or at  $2\frac{1}{2}$  cents per bushel for five months, in order to attract some business to this port for the winter. The Western elevators are also comparatively empty, and they are fighting to keep the grain West during the winter, and the war of rates that has been confined to sixty days' free storage in New York for the last two months, seems now to have extended to the opening of navigation next, and throughout the West, as both lake ports and country elevators have altogether only 40 per cent. of as much grain in store as a year ago. This state of affairs is due to two causes—the country was cleaned of wheat last spring and summer, to deliver on the Chicago and New York corners in that staple, so that far less than usual of the old crop was left in store or in the country on the coming of the new crop. The second, and it may prove the more important reason, is that farmers are not free sellers of wheat at the current prices; and as that is the earliest of our cereal crops, there has been but little else but oats for the warehousemen to take in. The old corn crop has also been held back till now by farmers in view of the short corn crop, and the new crop will not move till after the close of navigation. *N. Y. Produce Exchange Reporter.*

### MUSKRATS AND THE CANALS.

These little animals cause much trouble along the canals, by making holes running a long distance into the bank, which may at any time make an outlet for the water and become a dangerous break. Men are constantly employed in trapping them, and are paid beside their daily wages, fifteen cents for the noses and tails as proofs of the capture. They have the skins for themselves, which they sell for about eighteen cents. The muskrat is a cunning animal, and is hard to capture.

The Toronto *Globe* says that Canadian barley is much superior in quality and color to the Western grain, and its consequent demand by American malsters has caused a steady rise in the market. No. 1 barley is now about 18 cents higher than it was this time last year, and about 12 or 15 cents higher than six weeks ago. It is estimated that the profits to dealers in Toronto alone have amounted to \$200,000.

## WATERWAYS

The St. Mary's, Satilla & Turtle River Canal Co. at St. Mary's, Ga., has been chartered.

In many places in Holland, that paradise of canals, men are employed to drag the boats, and the slow, patient work seems to suit their plodding style of labor.

When the Committee on Resolutions of the River Improvement Convention came to the sixth plank it said, "We'll stick a pin there," and it did. It was a Hennepin. —*Peoria Transcript.*

The Illinois & Michigan Canal will be closed for navigation on Saturday, Nov. 19, from Joliet to La Salle. If the weather is favorable boats will be allowed to run after that date at the owner's risk.

The *Roller Mill* observes that a significant feature of the grain trade this year is brought out by a comparison between the Erie and Welland canals. While the former has done a steadily increasing business, the latter is reported as very quiet, scarcely anything doing.

The people of Monroe, Mich., are hoping to get an appropriation for the improvement of their harbor, which is badly in need of dredging, new piers, etc. Several congressmen of that district have lately visited the place for the purpose of inspecting and reporting upon the repairs needed.

A society for the protection of the New York canals has lately been organized, which proposes to protect them from the extortions of elevator rings at the canal termini. Appeal to the legislature so far has been in vain, the influence of the extortionists having been potent to defeat every reformatory measure introduced.

The *Cayuga Chief* approves of the lately organized "Society for the Protection of the Canals" and says, "The object is a righteous one which should receive encouragement from every true friend of the canals. The boatmen have been seriously hampered by the objectionable monopolies aimed at, and it is high time justice should be done them."

The receipts of grain by canal at Buffalo for the season aggregated 88,336,000 bushels, and the receipts of flour 3,231,000 barrels. The shipments of grain by canal were 43,888,000 bushels, and by rail 23,396,000 bushels. The canal men are highly gratified at the increase of business done by them, which will be an advocate in favor of the improvements they have asked.

It is said to be an every day occurrence to see "triple-headers" on the Erie Canal, loaded with grain or lumber. They make a sectional boat 294 feet in length and carry 25,000 bushels of wheat or 540,000 feet of lumber, and will no doubt supersede the double-headed system. This is a great advance over the original boats, which were but 80 feet in length and carried only 70 tons.

The laborers on the Panama Canal suffer terribly from the malarious climate, and die in large numbers. Every nationality is represented, and the worst types of human nature are found there; crimes of all kinds are committed, and it is called by those fortunate enough to escape from the place, a "hell upon earth." The number of lives lost in the construction of this canal will never be known.

The Erie Canal has been getting something like its old amount of business, but the prices are somewhat different. Freight charges now are but 4 cents a bushel, instead of 24 cents some years ago, and 70 cents per gross ton on merchandise, instead of \$2.50 thirty years ago. The boatmen claim, however, that they would make money at present rates if it were not for the exorbitant elevator charges made at New York and Buffalo.

The Maryland & Delaware Canal Co., was formed fifteen years ago, but has experienced many difficulties in its organization and in obtaining the right of way. The canal when finished will be 16 miles long and will cost \$6,000,000, but the work of construction has not yet begun. At present a trouble has arisen between the company and the contractors, and it is very doubtful when the project will assume a material shape.

The Chicago Board of Marine Underwriters has issued the following trip rates on grain to go into effect at once: From Chicago to ports on Lake Michigan, 75 cents, an increase over the rate issued on Oct. 30, of 15 cents; to ports on Lake Superior, \$1.75, an advance of 50 cents; to Huron, Sarnia, and Detroit River, \$1.25, an increase of 25 cents; to Georgian Bay, \$1.50, an increase of 25 cents; to Lake Erie, \$1.50, an increase of 50 cents; to Ontario, \$2, an increase of 50 cents; to Ogdensburg, \$2.15, an increase of 50 cents; and to Montreal, \$3.50, an increase also of 50 cents.

The Keokuk *Gate City* says the holding of three river conventions at Peoria, Quincy and Memphis within one month proves that the people are waking up to the advantages which would result from water competition, and that united action will be brought to bear upon the government to secure such appropriations as will insure the completion of improvements already begun, and the building of new dams, dredging of channels, or whatever may be needed to make the Mississippi and its larger tributaries accessible highways for commerce. The governmental work on the Upper Mississippi has proved of great value in enabling boats to run through to St. Paul during the entire season, and the construction of wing dams between St. Paul and Hastings has rendered navigable a portion of the river that was previously almost



impassible. These dams up and down the river have had the effect of deepening the channel, and the lack of funds to keep them in repair and add to their number will result in serious financial loss the longer the work is delayed.

A correspondent of the Ottawa, Ill., *Republican* thinks the United States government cannot spend \$20,000,000 of its surplus money in a better way than by making the needed enlargements and improvements in the Illinois & Michigan Canal. The question of Chicago sewage seems to be the main idea with some who attended the Peoria convention, while others urged the furtherance of the project, as a means not only of promoting the great business interests of the country, but as a national defense.

The San Francisco *Bulletin*, in commenting on the project to connect Lake Michigan and the Mississippi by means of a canal, says: "This is the era of canal-building. At least five other gigantic canal schemes are before the American public—the Hennepin, already mentioned, the Cape Cod, to connect Cape Cod Bay and Buzzards', one to cross the isthmus lying between the Delaware and Chesapeake bays, still another to enable commerce to avoid going around Florida, and the greatest of all, the Nicaraguan in Central America."

American capitalists are now turning their attention to the inter-oceanic canal at Nicaragua, and a vessel will leave New York some time the present month with a full complement of engineers, surveyors and assistants, under command of Commodore H. C. Taylor, U. S. Navy, who will at once begin the work of completing the survey across the isthmus and preparing the work of construction, which is to be commenced during the winter. The party will comprise forty engineers and 110 laborers. The total cost of the canal is estimated at \$65,000,000. It is expected that one-half the revenue of the canal will come from California, Oregon and British Columbia products.

The Erie Canal and its adjuncts are the property of the state of New York. They were built with much suffering and hard grinding to get the needed money, when the federal government refused her aid. They have made New York great and exalted her metropolis into the metropolis of the Union, and far on to becoming the metropolis of the whole world. They have grown upon their banks a string of cities, richer and finer than the whole state was when she built the Erie. Not one of them will consent to the laying of federal hands upon their work. They can have but contempt for a party so lost to natural pride as to "favor and invite" federal aid in their enlargement or maintenance.—*Exchange*.

The Brussels correspondent of the London *Times* says the Belgian engineers who have been at work on the Panama Canal express most unfavorable opinions as regards the position of the enterprise, and consider the difficulties still to be overcome as almost insuperable. On the other hand, Count De Lesseps has just announced to the Academy of Sciences at Paris that the Panama Canal will be opened on Feb. 3, 1890. The work will not then be entirely completed, he admits, but the passage will be free for twenty ships a day. It is estimated that this traffic will produce an annual revenue of from 90,000,000 to 100,000,000 francs. It is said, however, by those who have carefully investigated the facts, that the visible resources of the company are barely sufficient for one year's expenses, and seems to corroborate the report that the company is practically ruined. It is now 300,000,000 francs in debt, is less than one-fifth completed, and experts say the natural obstacles in the way cannot be surmounted.

The Convention for the Improvement of Western Waterways was held at Memphis, Tenn., Oct. 20, and continued two days. About 300 delegates were present representing the states of Ohio, Indiana, Illinois, Iowa, Pennsylvania, Minnesota, Missouri, Tennessee, Alabama, Mississippi, Louisiana and Arkansas. The object of the convention was to awaken an interest and to aid and encourage continued and united action on the part of the people to have the waterways of the Mississippi valley improved. This great river which runs directly north and south throughout the entire extent of the United States, washes the shores of twenty states and territories, and a large amount of commerce is carried on through it and its navigable tributaries, which would be greatly increased if the needed improvements were made. The committee on resolutions reported in substance the following: The failure of the appropriations to continue the improvement of our Western waterways is recalled with regret and meets with the disapproval of this convention. Congress is invoked to regard the interests of the people of the great Mississippi valley and the Northwest in this matter, and it is demanded that appropriations be made sufficient to prosecute intelligently and successfully the work of river improvement in the interest of our commerce until such work be fully completed. That a committee consisting of one delegate at large from each state, and one from each congressional district represented in this convention be appointed by each state delegation present, who shall be charged with the duty of preparing, as soon as practicable, a memorial to the Congress of the United States on behalf of the delegates who compose this convention, and the people whom they represent, in support of and in accordance with the foregoing resolutions, embodying such statistics and information as said committee may deem expedient. The Mississippi and Missouri commissions are endorsed, and the proposed improvement of the connection between Lake Michigan at Chicago and the Mississippi River is approved, as is also the opening of Bayou Plaquemine in Louisiana by means of locks. The report concludes: "That in our judgment the method

adopted by Congress of embodying in the bill known as the river and harbor bill all appropriations for the improvement of the rivers and harbors of the country is the wise and proper method of dealing with the question in practical legislation. We utterly repudiate the charges so freely made that it is tainted with corruption of jobs, and we maintain that a fair and intelligent examination of such bills will demonstrate the fact that the appropriations therein made for the various rivers and harbors of the United States are demanded by a fair and just consideration of all parts of one common country, and are more than usually free from the infirmities that naturally attach to human legislation. We affirm our absolute conviction that it is only through the river and harbor bills annually promoted in Congress that Western waterways can hope for any assistance from the general government, and that it is the plain duty of all friends of that system to give to that measure, as a whole and in its entirety, that cordial, unqualified and aggressive support. That this convention favorably regards the movement for the construction of the Hennepin Canal to connect the Upper Mississippi and the Illinois rivers. That in the interest of commerce of the Mississippi valley we regard it as the duty of the general government by special appropriations to maintain and protect the harbors of the principal cities and towns thereof." The report was unanimously adopted, and the convention at 4 P. M. adjourned sine die.

## Fires, Casualties, Etc.

John N. Hernig, brewer, Philadelphia, Pa., has died. Thomas Keating, grain dealer, Thompson Falls, Mont., has died.

T. D. Cooke, proprietor of a feed mill at Castle Creek, N. Y., has died.

Fulton & Peters, grain dealers at Wilmington, Ohio, have failed for \$50,000.

John Hamilton, proprietor of the Kent Brewery at London, Ont., has died.

Miller & Pettingill's distillery at Holley, N. Y., was recently destroyed by fire. Loss \$1,000.

The distillery of S. Pease at Louisburg, N. C., was recently destroyed by fire.

The grain establishment of H. H. Meschendorf at Los Angeles, Cal., was damaged recently by fire.

John Fehrenback, of the Hartman & Fehrenback Brewing Company, Wilmington, Del., has died.

The decease is announced of Louis Roemer, of the firm of L. H. Roemer & Co., ale brewers, New York City.

The grain elevators of Hallis & Co. and A. H. Hough at Eldora Junction, Iowa, were recently destroyed by fire.

The elevator belonging to Wm. Thompson at Rose mount, Neb., was burned on the 12th inst. Loss \$7,000; insurance \$3,500.

Nathan Tufts, a well-known Boston grain dealer, was instantly killed Oct. 20 by being crushed between a schooner and his wharf.

Daniel Smith, an employe at the Mutchener & Higgins Co. Elevator at Indianapolis, Ind., was badly crushed while attempting to couple some cars.

The grain warehouse of Mills Bros., Peoria, Ill., burned on the night of Nov. 7, with 4,000 bushels of oats. The loss was \$3,000; covered by insurance.

The granary of E. Wiedman containing seven thousand bushels of oats, near Sabin, Minn., was destroyed by fire Nov. 8. Loss \$5,000; partly insured.

The foundation of the Franklin Warehouse at Haywards, Cal., gave way recently, completely wrecking the building. It contained 90,000 sacks of grain. No one was hurt.

The grain elevator and mill of Conrad Asmuth at Brandon, Wis., were completely destroyed by fire early on the morning of Oct. 14. The fire is supposed to have been of incendiary origin.

The seven-year-old son of Peter Erickson, Minneapolis, Minn., was run over by a freight train while playing near the new East Side Elevator on the 9th inst. He died from the effects of his injuries.

The large elevator at Mapleton, fifteen miles west of Fargo, Dak., was burned Oct. 22 with its contents of 30,000 bushels of wheat. It belonged to the Sawyer system, and its capacity was 100,000 bushels.

Ervin Burdick, a wheat inspector at Geneva, Minn., while endeavoring to jump onto a moving engine fell under the train. His right leg was fearfully mangled and had to be amputated above the knee.

Laidley's grain warehouse at Omamee, Ont., was burned to the ground Nov. 10, together with a number of cars loaded with barley. Loss \$10,000; the building was occupied by Touchburn & Preston at the time of the fire.

The Capital City Grain Elevator at Indianapolis, Ind., owned and operated by J. A. Closser & Co., was partially destroyed by fire Oct. 31. Six or seven carloads of wheat and a few hundred bushels of oats were stored in the building and were badly damaged. Most of the machinery was burned. The origin of the fire is unknown,

but it is supposed to have been from a hot box or sparks from a passing engine. The loss is about \$10,000; fully covered by insurance. A new building will be erected at once.

A fire occurred on the evening of Oct. 30 on D. M. Reave's ranch near Chico, Cal., which destroyed the immense granary containing 350 tons of grain. The total loss is \$13,000; insurance \$7,000. The origin of the fire is unknown.

The cattle sheds and malt house of the Terre Haute, Ind., Distilling Co. were burned Oct. 23, supposed to be the work of incendiaries, as four fires broke out in various parts of the city at the same time. Loss about \$8,500, of which \$6,000 is covered by insurance.

The Flint & Pere Marquette R. R. Company's warehouse at Manistee, Mich., was destroyed by fire Nov. 5. Large quantities of grain, feed, etc., stored in the warehouse, were totally consumed. The company will at once commence the erection of a new building.

On the morning of the 4th inst. the first two floors of the dry kilns at the Richmond Elevator, Buffalo, N. Y., gave way, letting down a large quantity of wet wheat and injuring four men, Wm. Romer, Patrick Conner, Thos. Mahoney and Wm. Patterson in their fall.

A thousand bushels of wheat and a large amount of corn and oats were destroyed at the burning of McHose & Talbot's flouring mill at Vassar, Mich., Nov. 10. Entire loss on mill, machinery, etc., \$62,000; insurance \$22,500. Spontaneous combustion caused the fire.

At Clinton, Iowa, Nov. 1, a disastrous fire, caused by the explosion of a lamp, destroyed the telegraph and business offices, the corn and oats bins, and 5,000 bushels of grain at the Chicago & Northwestern stock yards. Nothing was saved. Loss over \$3,000, with a small insurance.

A fire at Park River, D. T., Oct. 23, destroyed the elevator owned by Cargill Bros. of La Crosse, Wis. The elevator contained 40,000 bushels of wheat, most of which was saved by opening the spouts and allowing it to run out. The loss is estimated at \$18,000; fully covered by insurance.

The new elevator of W. D. Overton at Mooresville, Ind., was totally destroyed Oct. 19, together with its contents, consisting of 12,000 bushels of wheat, 4,000 bushels of corn, and \$1,000 worth of clover seed. Loss \$20,000, only partially insured. The fire is supposed to have been the work of an incendiary, and this is the second time Mr. Overton has suffered in this way.

A fire broke out in the cellar of the American Cotton Oil Stock Co.'s building in Cincinnati Oct. 31, which, owing to the inflammable nature of the contents, soon entirely destroyed the large structure. The building was four stories high and covered an area of 150 feet by 60 in size. There was an immense quantity of oil in stock, and the loss on the building and its contents will reach \$150,000, on which there is a partial insurance.

A 14-year-old boy was found dead in a corn bin in the elevator at Shabbona Grove, Ill. The day previous some men were loading a car out of the bin when the corn stopped running and they supposed the bin was empty. The next day it was noticed that there was plenty of corn in the bin, and an attempt was made to load the car, without success. On closer examination it was found that the boy lay across the spout in such a way as to stop the flow of corn.

A fire broke out Oct. 26 in the large brick warehouse of Prescott & Pierce at Fresno, Cal. The doors were closed and the fire kept down for two hours, until water could be got near enough to reach the building. The water was finally obtained and pumped through 1,300 feet of hose, extinguishing the fire. The building contained 50,000 sacks of wheat and barley, of which about 15,000 sacks were damaged by fire, water and smoke. The loss will reach nearly \$20,000; partially insured.

The Albert Lea Roller Mills at Albert Lea, Minn., caught fire about 11 o'clock on the night of Nov. 5, and burned to the ground, the mill and elevator buildings as well as the machinery being a total loss. There were 25,000 bushels of wheat stored in the elevator and a large amount of flour and sacks, all of which was totally consumed. The entire loss is \$80,000; insurance \$30,000. The fire is believed to have originated from spontaneous combustion in the fourth story of the elevator, as it was first discovered there. The company that owned the property is composed of R. M. Todd, Dr. P. Hibbs, S. C. Janesen and S. Todd. The mill has been running over four years. The owners will rebuild as soon as possible, probably on a much larger scale.

At an early hour on the morning of Oct. 29 the large elevator at Wichita, Kan., on the Atchison, Topeka & Santa Fe Railroad track, was discovered to be in flames. The fire department was quickly on the scene, but the old elevator burned like tinder, and water was of no avail. The flames communicated to several loaded freight cars and to the Schuyler Electric Light Works, adjoining the elevator. The elevator was destroyed, causing a loss of about \$5,000. The electric light works had the roof destroyed, two freight cars were consumed, and ten others will need repairing. The cars were insured, but there was only \$500 on the elevator. The total loss will be somewhere in the neighborhood of \$10,000. The fire is attributed to incendiaries.

The Fettercairn Distillery at Kincardineshire, N. B., the property of Sir Thomas Gladstone, was burnt recently. About 1,000 quarters of barley and a large quantity of spirits were destroyed. The damage was estimated at \$100,000; covered by insurance.



## Press Comment.

### CHICAGO ELEVATOR MEN AS PAWN-BROKERS.

The elevator people do not take kindly to the suggestion that they hang the emblems of their business—three brass balls—over their office doors. They are in the pawnbroking as well as grain-storage business, but so long as they hock their own goods with themselves they cannot understand why the grain trade should be concerned. By the way, why are they not required to take out licenses like their brethren in commerce, Messrs. Lipman, Solomon Isaacs and Moses Abraham?—*Chicago Mail*.

### INDIAN AND AMERICAN WHEAT FARMING.

It is not probable that either the American or Indian farmers are remunerated for the cost of production where the yield is small. Farmers in the United States, at present prices, where they have an exceptionally fine yield, are receiving something more than the prime cost of production. It may also be so with the English farmer. The Indian farmer grows an average of 8½ bushels per acre at 49½ cents per bushel, with his crude methods of agriculture, even if labor and land are cheaper than in the United States. The American farmer, with the most approved implements of husbandry, such as steam plows, reapers and binders, threshers and winnowers and improved transportation facilities, has superior advantages for competition in the wheat markets of the world.—*Bradstreet's*.

### VALUE OF CROP STATISTICS.

A question in regard to the value of crop statistics may appropriately be raised on reading the statement that the Commissioner of Agriculture in Dakota makes the average yield of wheat in the Territory this year seventeen and a half bushels to the acre, against ten and a half bushels estimated by the bureau in Washington. A difference of nearly 70 per cent. is much too large to be passed over as unimportant, and those who take an interest in noting the discrepancy may be pardoned if they manifest some curiosity to know which of the two is nearer right. It will be no wonder if they come to the conclusion that such a wide difference proves that no dependence is to be placed in crop statistics, and that the money which is spent in preparing them would be better used by the people who pay the taxes. A paper published in Minneapolis suggests it as possible that the Dakota Commissioner views the wheat crop of the territory through immigration spectacles.—*Chicago Tribune*.

### MANITOBA WHEAT.

An official of the Canadian Pacific told a St. Paul newspaper the other day that the Northern Pacific could not haul Manitoba wheat to Duluth, as prices paid farmers in that province were already 6 cents above the prices on this side of the line, and besides that a new 1,000-barrel mill at Winnipeg and another one erected would take all the surplus of the crop, above that demanded by mills already in operation, or in Eastern Canada supplied by the Canadian Pacific. The *Commercial* of Winnipeg, has an article on wheat prices in Manitoba which is of interest in this connection. It says that Alex Mitchell is on his way to buy grain for the new Keewatin mills, which will not be finished in time to need much of this year's crop, and that he comes to buy because the Canadian Pacific is dissatisfied with the prices paid by buyers operating in the country and wants to raise prices (on paper the *Commercial* suggests). The *Commercial* also says if Mr. Mitchell buys on a paying basis, he must have a secret cut rate with the Canadian Pacific which other buyers cannot get. This is only a part of the Canadian Pacific's efforts to prevent wheat from coming to Duluth over the Northern Pacific, and goes to show that the people will gladly ship this way if they can.—*Duluth Daily Trade*.

### A CLEARING HOUSE FOR BUCKET SHOPS.

The latest development in relation to the "bucket shops" is the proposed formation by those in New York city of a "clearing-house association," of which the shops themselves and their customers are to become members. According to the scheme proposed, there is to be a "clearance" daily. The move is, without doubt, suggested by the recent recommendation of the Stock Exchange "Committee on Dullness." It is a perfectly transparent device, having for its object an attempt to mislead the public by throwing an apparent atmosphere of respectability around purely gambling transactions. The adoption by these institutions of the incidentals and accessories of legitimate exchanges, no matter to what extent, will not blind people to the fact of the broad distinction between the two classes of institutions. In the case of the bucket shops there is no sale or delivery, and no intent to sell or deliver any of the commodities pretended to be dealt in; whereas in such institutions as the New York Stock Exchange, the New York Produce Exchange or the Chicago Board of Trade, every contract made contemplates the actual delivery of the commodity or security bought or sold. With regard to the suppression of the "bucket-shop" nuisance it is known, of course, that an attempt has been made to secure the conviction of a bucket-shop proprietor in New York under the gambling law of the state. The result of the prosecution yet remains to be seen. It is one thing to declare a contract void in a civil suit, on the

ground that it is a gambling contract; it is a very different thing to hold the same transaction an act of gambling within the penalties imposed by the criminal law. The courts, it should be recollected, display a constant indisposition to extend the provisions of the criminal law by construction. Those who are anxious to bring about the extirpation of the bucket shops should secure the passage of legislation, bringing the bucket-shop business specifically within the prohibitions of the penal statutes against gambling. Such legislation could in no way interfere with transactions on the recognized Exchanges and Boards of Trade.

### MINNEAPOLIS ELEVATORS.

The insurance companies here are recouping some of their losses by the large elevator fire which occurred here in July, by which something over 1,000,000 bushels of wheat were destroyed. Wheat is pouring in here as it never has before, and receipts are exceeding the combined amount received at Duluth, Milwaukee and Chicago since the beginning of the crop year, and have already reached a little over 12,000,000 bushels. Of course the local agents are kept busy finding insurance to cover this vast amount of grain, which is either consumed by the mills or stored for future use. The mills here are making money for the first time in a couple of years, and making a great deal of it. Two more new and very large elevators are nearly ready for business, and the probabilities are that a great deal of wheat will be carried here until the next crop year begins. Objection is being found to the large elevators, because it is with the greatest difficulty that enough insurance can be secured to cover one of these vast storehouses. It will take a good many premiums, though, to cover the heavy losses of the companies on wheat risks, because, besides the St. Anthony elevator burned here, three or four elevators full of grain have been destroyed in the country.—*Minneapolis Correspondence N. Y. Spectator*.

### NORTHWESTERN WHEAT MOVEMENTS.

According to a carefully-prepared statement by the editor of the Minneapolis *Market Record*, 46 per cent. of the marketable crop of wheat in the Northwest has left farmers' hands and gone into railroad elevators. The estimates were obtained from every railroad in Minnesota and Dakota that ships wheat to any extent, and were figured for Nov. 1. It is very difficult to separate the estimates of Minnesota and Dakota; but this has been attempted, and the result is the general estimate that 30 per cent. of the Minnesota crop has moved, and 58 per cent. of that raised in Dakota. The estimates on the Northern Pacific line placed the Dakota movement at 60 per cent. Nov. 11, and 30 per cent. on that line in Minnesota. At the same date in the Red River Valley the movement was not far from 50 per cent., and in the James River country the average movement was 44 per cent. Nov. 1. Taking the whole line of the Chicago & Northwestern Road in Minnesota and Dakota, the movement had reached a fraction less than 35 per cent., while the Omaha figured 36 per cent. The Milwaukee Road had received at its stations from 20 to 40 per cent. in Minnesota, and 20 to 45 in Dakota, on the whole about 40 per cent. The Fargo Southern has taken in 47 per cent., while on the Fargo & Southwestern not less than 60 per cent. had left the farms.

### GROWTH OF NEW SEAPORTS.

There has been of late years a decided Southern trend to the export trade from Atlantic ports. It was not in the nature of things that the cotton raised in the gulf states, the tobacco of Virginia and Kentucky, the hog products and spirits of the Ohio valley, and the live cattle of the Texas and territorial ranges would continue to be sent to New York for distribution or for shipment across the seas, any more than to expect the raw cotton and hides will long continue to go to the New England coast towns for manufacture. Steam and electricity intensify the competition between localities as between persons.

We are led to these reflections by the mention of Newport News as one of the ports from which account is now kept of grain exports. It is only a few years since that the name Newport News conveyed only the idea of a beautiful corner of the Hampton roadstead, at the confluence of James river, memorable as the scene of conflict between the "Merrimac" and "Monitor." To-day it is a town of 2,500 inhabitants, with a series of commodious wharves, frequented by lines of foreign and coastwise vessels, besides a number of irregular steamers, which put in for the benefit of excellent steam fuel brought from the Kanawha coal-fields. The building of a new seaport is not an easy matter, calling, as it does, for large capital and railroads penetrating a rich back country, besides natural advantages of depth of water, easy approach and sheltered anchorage or holding ground.

From figures compiled from official sources, it appears that for the twelve months ending Aug. 31 the doings of the ports of Norfolk and Newport News were:

	Exports.	Imports.
Newport News.....	\$ 7,112,318	\$677,698
Norfolk.....	15,635,754	51,726

So that it would seem the new seaport is steadily gaining on its close neighbor, which dates back 250 years, and already claims to be the seventh or eighth in rank of export cities. There is this distinction to be noted between the two ports: Norfolk is eminently a Southern port, even more so than Baltimore; its railroads penetrate and drain a territory lying wholly south of the Ohio; whereas Newport News draws traffic also from Cincinnati, Chicago, and even Minneapolis. In this sense it might be considered to some extent a rival of New York, Boston and

Montreal; but, in fact, Newport News is more of an out-post of New York than an independent competitor. Its railroad, by an expanded daily steam-ferry, terminates here.—*N. Y. Commercial Bulletin*.

### TRADING IN "FUTURES."

It would be difficult to discover a business topic or method which is so commonly misunderstood by intelligent people as the "future contract" in wheat trading. The misapprehension on this point is not confined to any single class, rank or profession, but includes merchants, farmers, manufacturers, legislators and professional men. The ignorance of ministers, newspaper writers, and political demagogues, who make it a business to attack this supposititious evil, however, is less damaging to the world's grain trade than the partial knowledge of the average business man of the practical operation of this method in the distribution of the world's produce. The validity and propriety of the transactions of the various produce exchanges are considered doubtful because of the great losses which mad speculation in some of the products there dealt in periodically entail.

The speculative classes, who seldom own, or wish to own, any of the produce which they buy and sell, are always most conspicuous, and it is their dealings which come to the surface to the public condemnation of all the other interests involved. The undercurrent of routine distributive operations is lost sight of in the contemplation of the exciting, precarious and destructive speculation which is carried on to a greater or less extent in all parts of the world.—*Inter Ocean*.

### THE DULLNESS IN SPECULATION.

There has thus been an immense lessening in the volume of merely speculative trading in produce, and the tendency of the situation is rather to an intensification of this dullness than to anything more than a spasmodic revival from it. In other words, the golden age of the commission merchant may be said to have passed away, and with it the old-time opportunities for making large profits by the storage of grain in the large cities, to be sent to the consumer only after the speculators have grown tired of bandying it back and forth among themselves as if it were a plaything of the football order. There can be no question that the tendency of the age is to render unnecessary the interposition of the gambler as a middleman between the men who raise food and those who consume it. The speculator will have less and less of a slice from the loaf as it passes from the grower of the wheat to the eater of the bread in the future, and the grim irony of fate will assert itself in abolishing, in large part, the gambling in food just as the thing has been reduced to a science in which the operator may count upon as almost a certainty. The merciless policy of exacting big carrying charges for untold millions of bushels of grain that have only a nominal existence is accompanied by such a radical change in conditions otherwise that the men who have recently formulated and adopted it are already finding their occupation going, if not gone.—*Chicago Tribune*.

## PERTINENT QUESTIONS AND ANSWERS.

Q. Does all grain shipped from Chicago by lake come to Buffalo?

A. No. About half the grain shipped by lake from Chicago goes to Canadian ports.

Q. What does it cost vessels per thousand bushels to be discharged at Sarnia, Collingwood, Midland, Owen Sound and Kingston?

A. One dollar and a half to two dollars per thousand.

Q. How much in Buffalo?

A. Five dollars and seventy-five cents per thousand.

Q. What does it cost per thousand to transfer grain from canal boats to ships in New York and Brooklyn?

A. Eighteen dollars per thousand.

Q. How much in Philadelphia?

A. Two dollars and twenty cents per thousand pays the entire port charges on grain in the Quaker City.

Q. How much do the elevator owners charge per thousand for trimming grain in ships in New York and Brooklyn?

A. Eight dollars.

Q. How much in Chicago?

A. Seventy-five cents.

Q. What does it cost per thousand bushels to transfer grain in Buffalo?

A. Sixty-two and a half cents.

Q. How much do they charge?

A. Fourteen dollars and a half.

Q. What does it cost in New York?

A. One dollar and twenty-five cents per thousand.

Q. How much do they charge?

A. Eighteen dollars per thousand.

Q. Are all these elevators in use?

A. No, eight floating elevators have been idle in Erie Basin for the last four years.—*Canal Advocate*.

The *London Miller* says that the English wheat crop is not as uniformly good as it was last year, but the samples of foreign wheat are the best for many years. On this account, and through the irregularity of the American wheat crop, English and Hungarian, Russian and French flour may be expected to equal the best products of the big American mills.



## THE EXCHANGES.

Detectives are engaged in shadowing the bucket shops in Toronto, Ont., taking note of those taking "flyers" there and of the stock and other securities dealt in.

Seats in the Call Board of San Francisco are considered valuable property, a majority of the members holding them as high as \$2,000 and \$2,500, many at \$3,000, while a considerable number say a seat ought to be worth \$5,000, and they will never sell for less money.

B. P. Hutchinson has been reinstated in his privileges as a member of the Chicago Board of Trade, after having served forty-eight days of his original suspension of ninety days for trading after hours. In the opinion of the Board of Directors the punishment was already sufficient-ly severe.

The Omaha Board of Trade held its first session as an open board on Monday, Oct. 17. The directors have empowered the committees to arrange for the obtaining of the Chicago grain and provision reports daily, which, as is well known, reflect the state of the markets throughout the world.

The Duluth Chamber of Commerce has appointed a delegation of its members to visit Washington at the approaching session of Congress to aid in obtaining legislation affecting its harbor. The Chamber also invites the Members of Congress from the state to visit Duluth and ascertain just what is needed.

Judge Mills, of the Eleventh Judicial District of Minnesota, recently decided, in a case brought before him, in favor of the validity of a by-law of the Duluth Board of Trade, by which the claims of members of the Board against any other member whose membership is sold for assessments, are given priority over the claims of other creditors.

The Minneapolis papers think there has been too much "monkeying" with grades in barley at Chicago. It appears that some parties on the Chicago Board have sold too great an amount of No. 2 short, and now that so much of the grain arriving drops below the No. 2 grade, the shorts are complaining to the inspection department that grading is too rigid. Mr. Price, Chief Inspector, says the grading is all right, but that the trouble is with the speculators themselves, who have sold more than they can deliver of No. 2 grain.

The plan for the establishment of a clearing-house system for the settlement of differences in transactions in grain on the New York Produce Exchange was brought before the grain trade of that body and adopted with an amendment empowering any person to demand a contract in place of clearing-house slips, where he preferred to do so. The proposition will go before the Board of Managers of the Exchange, by whom it is expected it will be adopted, so that before long the system will be put in operation. The working of the system will be watched with interest by parties both within and without the trade.

The Toronto Board of Trade has been called upon to act in the case of John B. McKay & Co., grain dealers, against whom the charge was proved of having in five different cases sold short grain. The council considered the advisability of expelling the members of the firm from the Board, and the statement of one of them was heard in defense. He attempted to justify his transactions by the statement that what he had been accused of was done by other firms in the business, and was "only one of the tricks of the trade." Great excitement was caused by this speech, but the case was not decided at the time.

The members of the Chicago Board of Trade have seen dull times during the past three months, and various reasons are assigned for the stagnation of business. The disastrous results of the June wheat deal is the first and weightiest cause of the depression, many firms being so hard hit that they have been unable to recover. Country operators have become timid, and fail to send in orders as formerly. Wheat is so low that the bears advise "to sell the futures for the carrying charges," and the outcome of the corn crop is as yet too uncertain to speculate on; the new commission rule has worked disadvantageously in the opinion of a great many, and has caused much unpleasant feeling. Altogether times are exceedingly dull on the floor, the selling of stocks being about the only sign of activity.

The San Francisco 'Change thinks that speculative trading on the Call Board of the Produce Exchange of that city, might be largely increased by changing the methods of transacting business somewhat, and suggests that a third session of the Exchange be held every day for those of the members who choose to attend, at which non-transferable contracts shall pass between the members without margin. Thus A contracts to deliver to B 100 tons wheat within a certain time at a certain price, and B contracts to take it at the price and within the time stipulated. The members know each other; no marginal deposit is needed, none required. If either party should fail to keep his contract, or make proper settlement within a reasonable time, the procedure would follow the usual course in such cases. 'Change thinks such a plan of op-

erations would do no harm but bring in considerable purely speculative business, and if the third session became a success, speculation in wheat would be the popular thing. The third session could then be taken up by the Produce Exchange under suitable rules and regulations, and the brokers would be happy in the return of a lucrative commission business.

The New York Produce Exchange has under consideration a scheme for the founding of a Clearing House, and in a circular issued by a special committee state some of the advantages of such an institution as follows: It in no way changes the present mode of doing the business, while simplifying the clerical work and reducing the risk; it provides for the absolute checking of the day's transactions by 9:30 a. m. of the following day, by a confirmation slip, thus doing away with disputed trades of more than one day's standing, which, under the present system, are of frequent occurrence, causing a loss to either or both parties; it does away with the present cumbersome system by substituting the above mentioned slip, which is in every way as binding as the present form of contract; the payment or collection of a single check does away with the payment or collection of numerous checks, the work attendant thereon, and the liability of error; and lastly, by 12 o'clock, noon, it will be well known whether all the differences have been paid, and the margin can thus be safely released the same day. The San Francisco Produce Exchange is contemplating the establishment of a similar auxiliary.

### GRAIN STORAGE AND SHIPMENT.

The Houston County *Argus* is still firm in the faith that the plan of having the railroad companies of the state receive, store and forward grain precisely as they do other kinds of freight is the best one. While we cannot agree with its statement that the present grain and warehouse law has proved itself "an additional burden" rather than a relief, it is undoubtedly correct in pointing out as the chief defect of that law the fact that it provides for inspection of grain only at terminal points, after it has passed entirely out of the hands of the farmer. The *Pioneer Press* has not declared that the method suggested by Mr. Smalley is an impracticable one altogether, but it has pointed out certain plain difficulties in setting it in operation; difficulties which no one as yet has been able to explain away. The principal of them is thus lightly dismissed by the *Argus*:

The practice, the *Argus* apprehends, would be that at each station there would be two or more buyers who would purchase and ship the grain, and it would be a matter of slight difficulty to arrange for either the mixed or separate storage of the grain bought by them. The fixing of the grade of the grain bought would be a mental operation of each buyer, by which he would determine the price he could pay for the grain. The seller would hear nothing of grades, but he would sell or not as he thought that the offers made approached what he regarded as the value of his grain.

Here are two or three assumptions which are open to serious question. Maybe there would be at least two buyers at every station, and maybe not. If the latter were the case at any point of shipment, what then? Still more serious is the error involved in the supposition that the farmer, with his load of grain standing in the open air, after having been hauled several miles to the elevator, is in a position as independent as that of the merchant, who has his wares under cover, and can tell the buyer to take them or leave them as he pleases. To make a sale requires the agreement of two minds. Suppose the farmer and the buyer do not agree as to the grade, and consequently as to the value of the grain. What, then, is the former to do? He is one in a long line of sellers, each anxious to take his turn, dispose of his product, and get back home again. He cannot waste time in chaffering. He can take what is offered or refuse it. But, if the latter, under disagreement as to value, then what shall he do with his wagonload of wheat? It is astonishing to find, in an article whose writer is accustomed to weigh assertions before making them, the airy dismissal of the matter of mixed or separate storage as a thing easily settled. On the contrary, as every one knows, it is quite impossible for a railroad or a buyer to provide separate bins for every farmer who may disagree with the valuation placed upon his crop, and desire to store it and receive delivery of the identical grain at some future date. The present system of grain handling, though infinitely better than that of a few years ago, seems to be far from satisfactory to the people of interior points, who are entitled to most consideration. We have been unable to find any remedy for their grievances more promising than the provision of an absolutely free and open market, by making all places where grain is received and stored public elevators, by requiring wheat to be received, graded and stored there and receipts to be issued against it, and by thus enabling the farmer to sell a definite quality and quantity of product, either to the local buyer or the millers and merchants of distant central markets as he may find most to his advantage.—*St. Paul Pioneer Press*.

### TO POULTRY RAISERS.

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Position in some large elevator by one who is now engaged in grain buying and who likes the business. Am a good judge of all kinds of grain. Am 24 years old, talk and write both German and English, and would like a position as buyer or taker in of grain, or to handle the buying department. Would prefer a place where there is a chance of being promoted. None but responsible parties need apply. Can come highly recommended. Address

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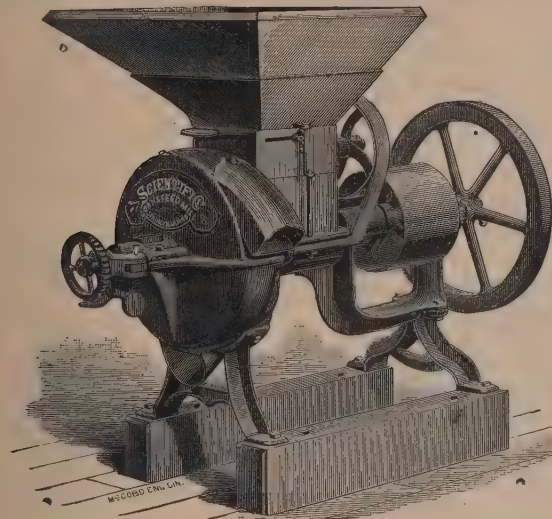
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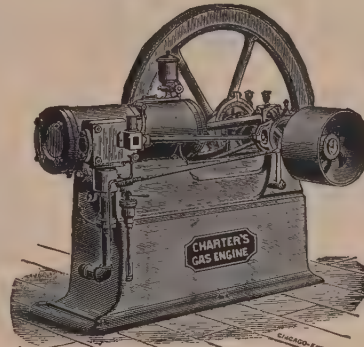


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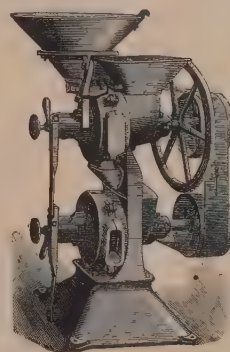
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[Signed.]  
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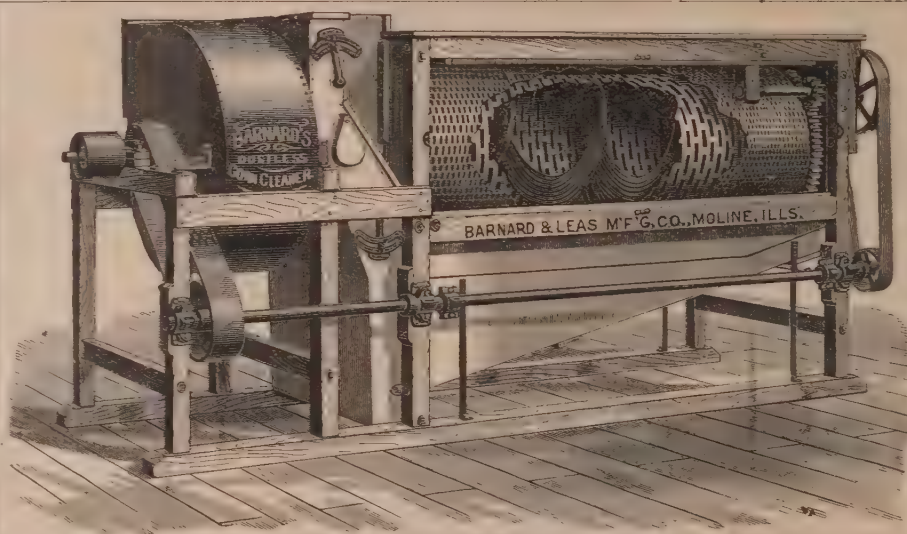
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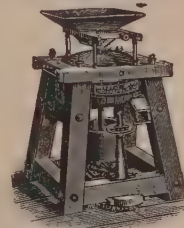
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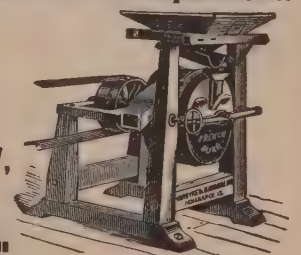


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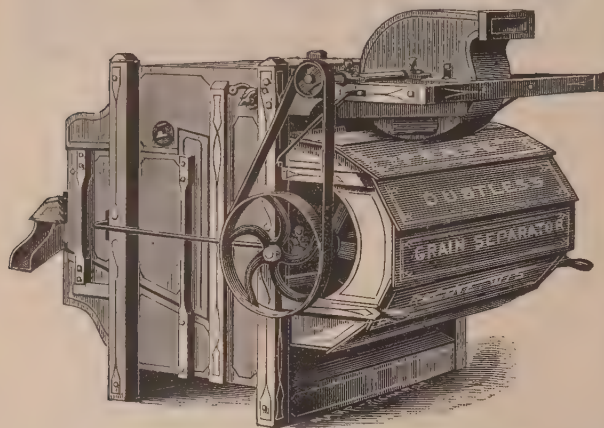
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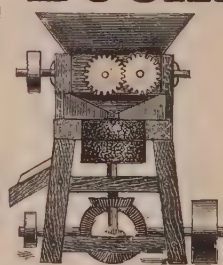
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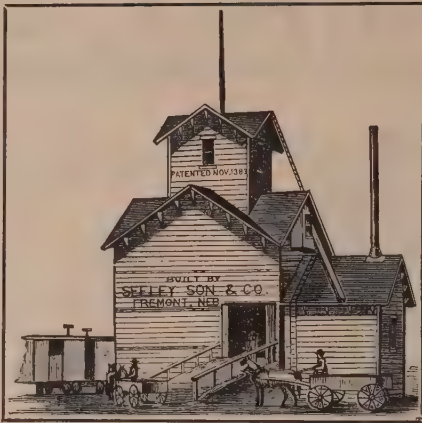
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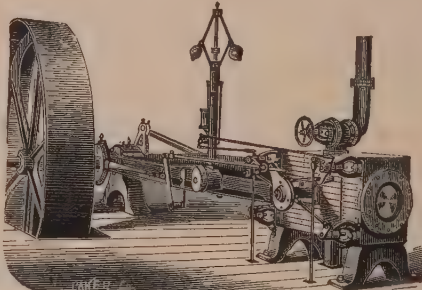
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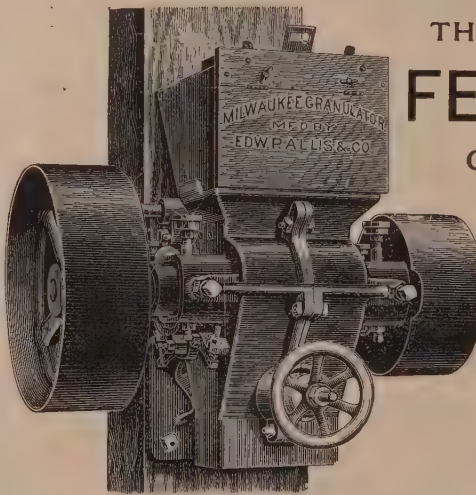
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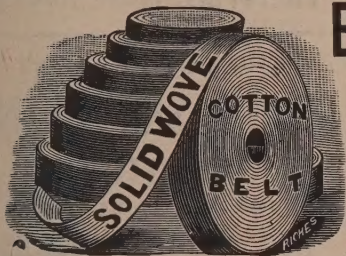
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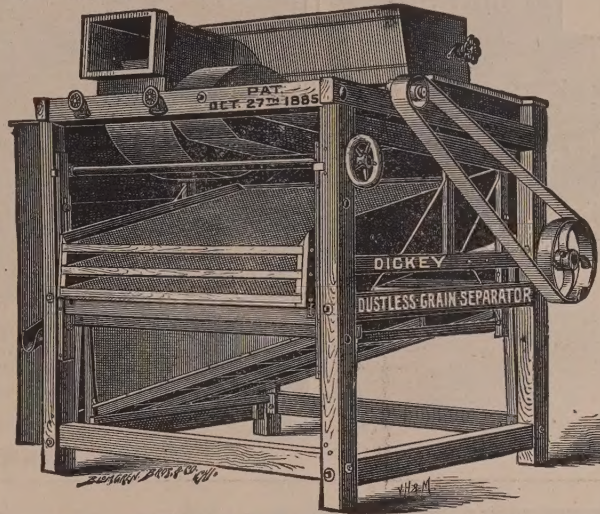
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WE CLAIM FOR IT SUPERIORITY

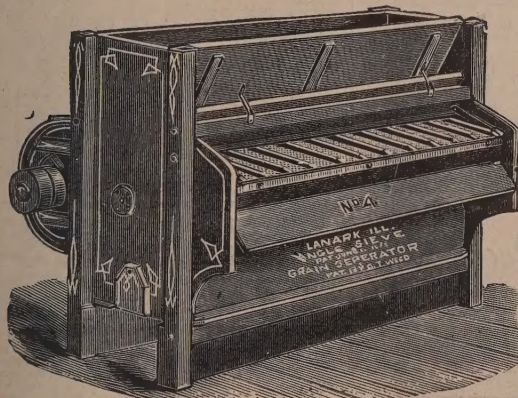
over everything of the kind made, in simpleness, durability saving of power, capacity and cost of construction. Its height will accommodate any number of spouts from different points, without moving machine. They have a capacity from 700 to 1,500 bushels per hour. We also control exclusively the manufacture of the celebrated Dickey Giant, End and Side Shake, Warehouse Mills, that have attained such a world wide reputation. Sent on approval to any reliable party. For full particulars address

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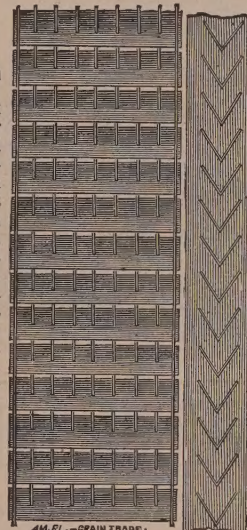
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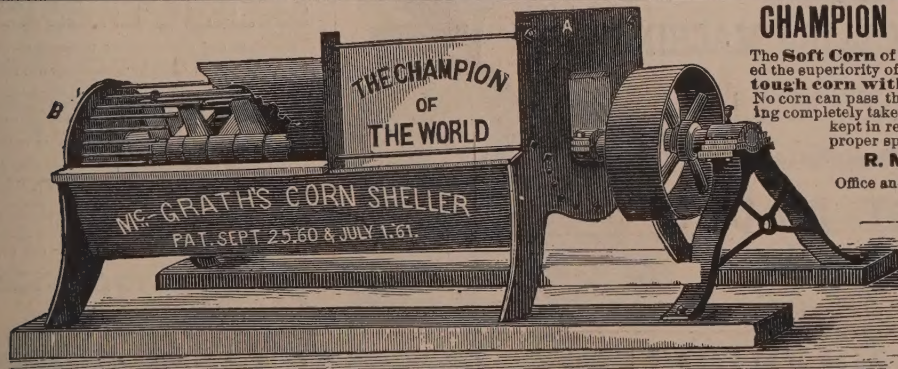
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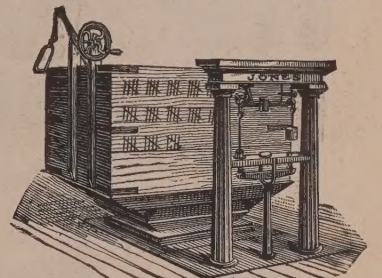
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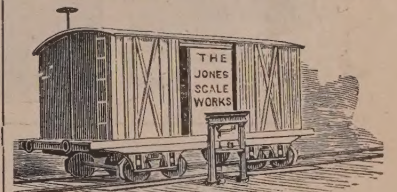
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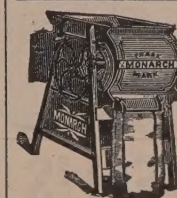


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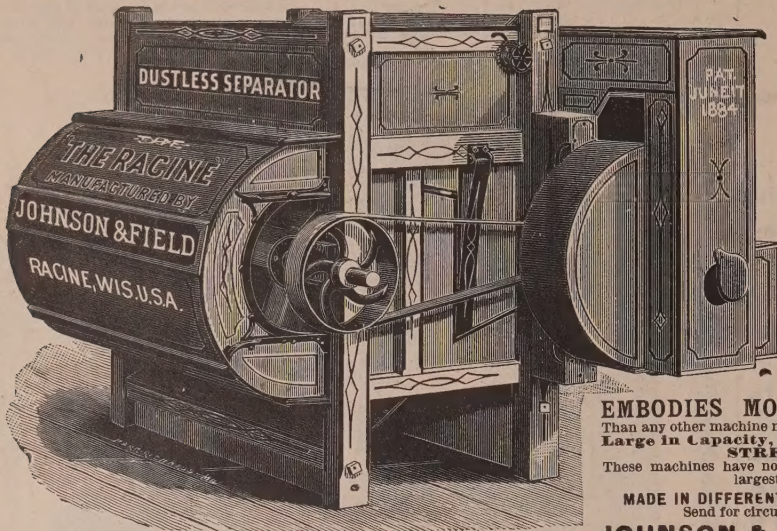
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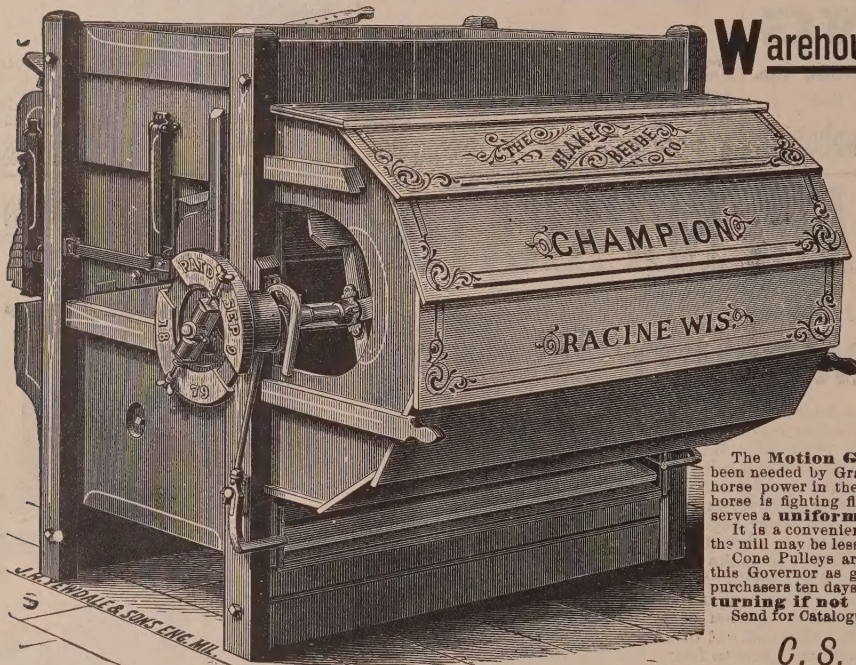
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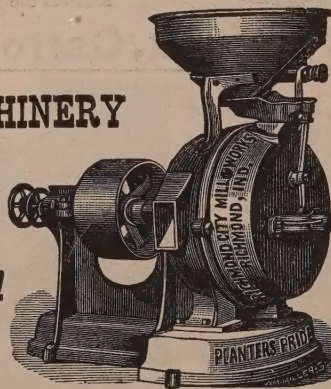
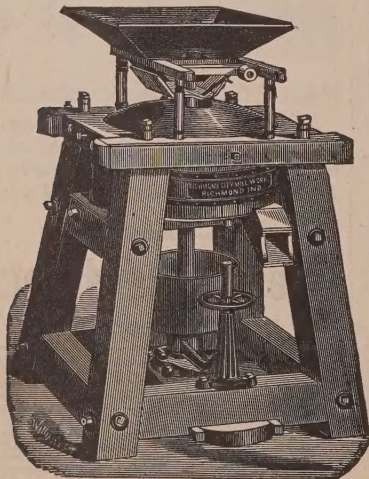
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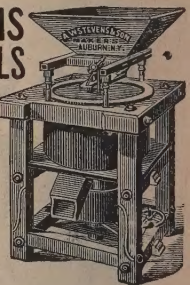
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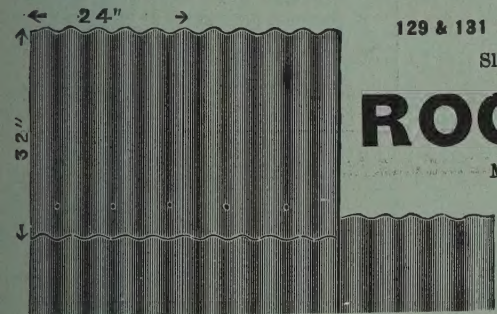
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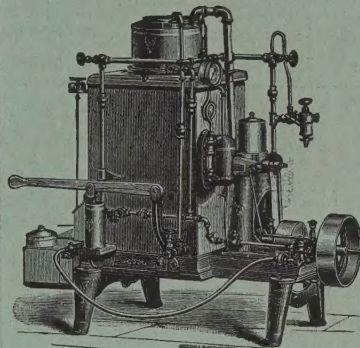
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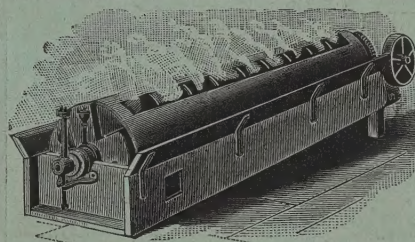
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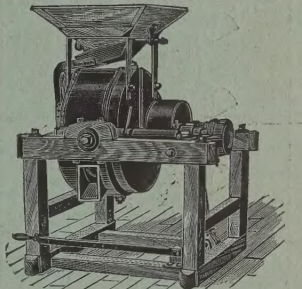
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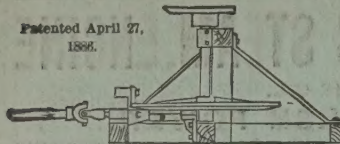
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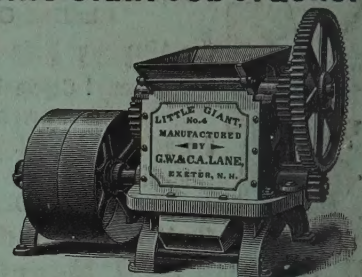
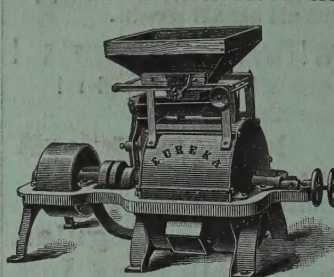
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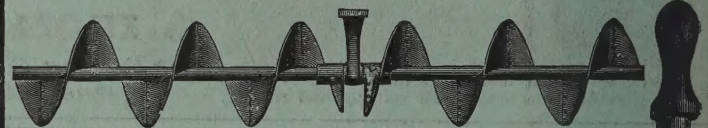


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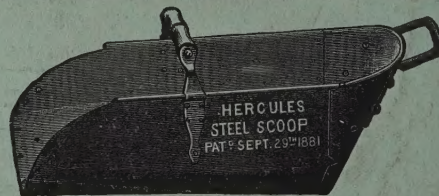
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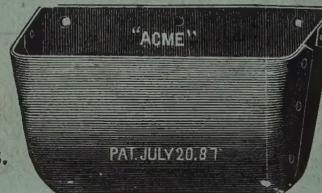
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